

ZKL NEWS



VUZ
Výzkumný Ústav Železniční, a.s.
Certifikační orgán pro certifikaci výrobků
se sídlem: Novodvorská 1698, 14200 Praha 4 - Braník, Česká republika

vydává

CERTIFIKÁT
Číslo: 001/2008

pro výrobek

**Nápravové ložisko pro železniční kolejová vozidla
typ PLC 410-15/16-2**

kolé standardní klasifikace produktu: 35.20.40

výrobce

ZKL Brno, a.s.
se sídlem Trnkova 111, 632 00 Brno, Česká republika
IČ: 2582901

Na základě výsledků hodnocení výrobku uvedeného ve zprávě o zjištěních ZZCC08001 ze dne 27.2.2008 se tímto certifikátem potvrzuje shoda výše uvedeného výrobku s řáde uvedenými technickými požadavky:

TPF ZKL 11466
ČSN EN 12980

Platnost pro: opakovaně vyráběné výrobky za smluvně dohodnutých podmínek
Platnost do: 28.2.2013
V Praze dne 28.2.2008

Ing. Ladislav Dušek
Ing. Ladislav Dušek
vedoucí certifikačního orgánu



IndustryExpo
Fair Bratislava



ACRI Meeting



Paperex 2007
Delhi



First Technical
Trainings

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INDUSTRYEXPO BRATISLAVA 2008

In the days from February 20 to 22 2008 there was being held the second international exhibition IndustryExpo 2008 in Incheba exhibition centre in Slovak capital of Bratislava.

ZKL Group was represented there by its subsidiary company ZKL Slovakia spol. s r.o., demonstrating to visitors the Group production program.

Its stand was oriented to thematic sections in following spheres of 60 years history of bearing production in Brno: bearings for railway bogies, bearings for transmission boxes of concrete ready mix trucks, special bearings for wire-drawing mills and iron works, pipes for automotive industry, bearings awarded in international fairs and a complete offer of ZKL bearings assortment.

The character of the stand attracted both the business partners and media as well. At the opening we welcomed in the stand the teams of Slovak radio and TA3 TV who were interested in novelties among the exhibits and documented them for their news transmissions.

Our business partners and the public were interested namely in exhibited bearings for concrete ready mix trucks in view of a wide range of design solutions and dimensions. There were exhibited also the newly developed types of bearings with machined brass cage, steel sheet cage and polyamide cage, spherical and ball rolling elements and with various types of



surface finish. Great interest was paid also to bearing with ball sliding surface being now under development in ZKL group. Many clients were attracted by special bearings for wire-drawing mills and bearings for railway bogies as well as the complementary pipe program for automotive industry.

As a proof that ZKL Group has enough products to offer is the invitation of Mining Union of Czech Republic to take part in mining technology exhibition within the Expo Mokra 2008 project and particularly to make presentation of ZKL bearings in frame of exhibition pavilion in stone quarry exhibition grounds.

All the above facts are further confirmed by the interest expressed by rectors and deans of Bratislava and Trencin universities who would like to establish cooperation in education and practical vocational training of students as well as in opportunities of solutions of tasks in frame of graduation and diploma theses. Their capacities in designing and development of new dimensional types of bearings were offered as a counter value. This assistance is meant to improve and accelerate bearings development and their production launch.

We feel that all the acquired contacts and pieces of knowledge will serve for further strengthening of good name of ZKL brand in the world bearing market.

Vladimir Helik, Eng.
Manager of ZKL Slovakia, spol. s r.o.

FIGURES AT RANDOM

Preliminary Economic Results of ZKL Group for Year 2007

Consolidated sales revenues of ZKL Group reached the level of CZK 1 107.6 mil., being by 5.45 percent higher against the preceding period.

The production plan of ZKL Brno, a. s. was not fulfilled on account of delayed material shipments. The production in comparable prices CZK 487.3 mil. was by CZK 12.7 mil. below the plan but it exceeded the production of preceding year by CZK 27.1 mil.

As for ZKL Hanuovice a.s. the production amounting to CZK 313.2 mil. surpassed the plan by CZK 9.5 mil. and by 49.1 mil. the figure of the preceding period.

The average recalculated manpower of whole ZKL Group was 943 persons, higher by 39 persons than in past period.

According to preliminary non-audited figures ZKL Group attained in year 2007 positive economic result of CZK 35.5 mil.

Zoltan Szivanyo, Eng.
Economic Director, ZKL a. s.

NEW ZKL BEARINGS FOR RAILWAY AXLEBOXES

Newly presented cylindrical roller bearings for axleboxes PLC 410-15/16-2 of ZKL Brno, a.s. production program are equipped with polyamide-made cage. They meet the stipulations of CSN EN 12080 standard (Railway Applications - Bearings for Axleboxes - Roller Bearings) as well as the regulation of UIC (International Union of Railways) No. 510-1 containing technical requirements for railway cars travel gear. They are manufactured and supplied in conformity with special technical conditions guaranteeing a maximum quality of bearings for end users. The compliance of the product with technical requirements is documented by Product Certificate of Vyzkumny ustav ˇeleznicnı (VUZ) Praha (Railway Research Institute).

These bearings do not require any extraordinary maintenance during operation. They are designed for maximum traveling speed of 160 km/hr with load up to 150 kN of wheel set or for speed of 120 km/hr of up to 225 kN load. Recom-

mended quantity of lubricant for axlebox bearing (bearing box) is 0.6 kg.

The design of cylindrical roller bearings permits to accommodate all axially acting forces arising in railway operation without affecting the service life of the whole axlebox bearing.

The polyamide cages were developed in collaboration with SLB Brno, s.r.o. to fully conform to the European standard EN 12082. They are manufactured from polyamide 66 reinforced by 25% of glass fibers (PA 66 GF25). Compared with machined brass cages they are substantially lighter, which minimizes dynamic adverse conditions in bearings. Two sliding elements steel - polyamide have better sliding properties as compared with steel - brass. In addition to that polyamide better damps vibrations and noise. Thanks to technologic abilities the cage design has been solved to permit optimum passage of lubricant to rolling elements. Another advantage of bearings is self-lubricating capacity of polyamide. In

case of lubrication deficiency the wheel set seizure does not occur so instantly as in case of brass cage bearings.

Axlebox bearings with cages made of polymer materials are used in all spheres of production and operation of railway vehicles. The company materials of world renowned bearing manufacturers as well as pieces of knowledge gathered in various trade fairs of railway technology obviously show that such bearings are being used in a greater extent than bearings with machined brass cage. It concerns not only Europe alone but America and Asia as well and the use of these bearings is not limited to cylindrical roller bearings and for freight cars. On the contrary, the use of polyamide cages in taper roller bearing units and in most bearings for high speed rail cars became quite a commonplace.

Based on performed tests the independent inspector submitted that the bearings PLC 410-15/16-2 produced by ZKL Brno, a. s. are fully interchangeable

with bearings PLC 410-15/16 with machined brass cage, without further operation tests.

The successful development of the said bearings permitted ZKL Brno to launch also development of further axlebox bearings in execution with new polyamide cage.

Vladimir Zikmund, Eng.
Director, ZKL - Vyzkum a vyvoj, a. s.



STANDPOINT OF ZKL GROUP TO SITUATION IN KLÁŠTEREC PLANT

In frame of manipulated bankruptcy proceedings of the property and assets of the joint stock company ZKL Klášterec nad Ohří by organized circle around the judge Jiri Berka, J.D., the earlier bankruptcy administrator Daniel Thonat, Mgr., against whom as a member of bankruptcy mafia criminal case is also being held, had sold the bankrupt company by contract of purchase/sale dated August 30, 2002 to the company ZKL Klášterec spol. s r.o. (formerly company Comindustrial spol.s r.o.).

Owing to the fact that this contract of sale was invalid, the present bankruptcy administrator Mr. Jiri Kadeřábek, J.D., raised legal action on August 29, 2005 to return the entire complex of property and assets including immovables forming the company back to bankruptcy assets.

The claim was accepted by Regional Court in Ústí nad Labem who passed judgment on April 18, 2007 under ref. no. 45 Cm 67/2005 by which the company ZKL Klášterec spol. s r.o. was imposed the duty to return all properties, rights and material values forming the said contract of company sale dated August 30, 2002 back to bankruptcy assets. This judgment was later confirmed by Prague Supreme Court of Justice as the court of appeal on January 10, 2008 under the file no. 15 Cmo 125/2007 and came in legal power on February 15, 2008.

The company operator ZKL Klášterec spol. s r.o., the sole owner of which is Slovak company HTC Holding a.s., was given notice by the bankruptcy administrator Mr. Jiří Kadeřábek, J.D. to return back the substance forming the company in the extent of the said contract of sale dated August 30, 2002.

ZKL Klášterec spol. s r.o. operating the company until this time, i.e. fully exploiting its production capacities, is not willing to return it in functional condition and argues by facts that some technology units had been substituted by new installations which are not the property of the bankrupt company.

Instead of fully functional plant taken over in year 2002 ZKL Klášterec spol. s r.o. company intends to give back just a torso of these properties and thus to entirely prevent functionality of the plant employing about 400 people.

On the side of the bankruptcy administrator there have been made measures consisting of the plant surveillance with the aim not to allow removal of technology and other matters of bankrupt company. In spite of these measures the operator ZKL Klášterec spol. s r.o., prompted by the owner HTC Holding a.s., started to dismantle some installations and equipment forming the company, thus bluntly intending to completely paralyze its production capability which he had taken over in year 2002 as fully functional. These steps among others were aimed at exertion of pressure on the bankruptcy administrator Mr. Jiří Kadeřábek J.D., who was ready to conclude with ZKL Klášterec spol. s r.o. a contract of lease and thus to enable HTC group company to continue in the existing entrepreneurial activities, simply in order to secure work for company employees. He presented his readiness to conclude a contract of lease with ZKL Klášterec spol. s r.o. on Friday March 28, 2008 both in front of creditors' committee members and at bankruptcy court (Regional Court Ústí nad Labem). Such proposal was opposed by opinion of creditors' committee members who univocally gave preference to operation of the company by the bankrupt under the support by ZKL Group, a.s., who is prepared to warrant for it in case of ending the bankruptcy by compulsory settlement by law and to support technically and financially the revival of production by the bankrupt. Simultaneously the members of creditors' committee warned on the Friday session of the fact that the hitherto practice of ZKL Klášterec spol. s r.o. was illegal, namely because it did not respect the directions of bankruptcy administrator and refused to hand over the company to him.

In the afternoon hours of Friday March 28, 2008 there was held a session between bankruptcy admin-

istrator Mr. Kadeřábek J.D. and representatives of ZKL Klášterec spol. s r.o. in respect of conditions of possible lease of movable and immovable assets forming the bankrupt company. Anyhow, no accord was reached, the bankruptcy administrator stated plainly that he had not been prepared to accept the methods of this party belonging to HTC Group tending to be rather a sort of blackmail.

During the evening hours of the same day the bankruptcy administrator contacted ZKL a.s. and offered them the eventuality of conclusion the contract of lease. The offer was accepted with the provision that in such a case ZKL-ROLL, s.r.o. being a company belonging to Brno ZKL Group of companies would become the tenant of the bankrupt objects.

This contract of lease was concluded in Sunday afternoon on March 30, 2008.

At present the tenant ZKL-ROLL, s.r.o. has started works connected with physical takeover of the objects in the bankrupt company ZKL Klášterec nad Ohří, a.s. As far as the staff is concerned, all the approximately 400 employees are employed by ZKL Klášterec spol. s r.o. and it rests on it to decide how further employment of these people will be solved or in which manner it will be terminated. In fact ZKL-ROLL, s.r.o. has offered the company of Slovak HTC Group to assist by readiness to take over the staff, provided an accord on method of solving the matters of store of materials, production in process and finished products inventories being the property of ZKL Klášterec spol. s r.o. is simultaneously reached.

Priority interest of the tenant ZKL-ROLL, s.r.o. is to revive the production at the soonest and to offer the employees of ZKL Klášterec spol. s r.o. new job. Presently the activities oriented in putting into service of the technology are under way and consequently the skilled workers will be employed – either as a parallel or new employment.

Jiří Prášil, Eng. CSc.

ZKL Group General Manager

SESSION OF WINGED WHEEL FOUNDATION

After last year's December session of Winged Wheel Foundation (NOK) in Brno M Palace the XIV. Joint session of NOK board of directors and board of trustees took place again in Brno. The host of dozens of prominent guests from railway industrial repair companies, Railway Research Institute Praha, National Technical Museum Praha and representatives of other institutions was our ZKL Group Company.

It was the opportunity for our General Manager and simultaneously member of NOK board of trustees Mr. Jiří Prášil, Eng. CSc. to welcome the guests in the new premises of ZKL technical and



commercial center and to acquaint them with 60 years history of roller bearings production in Brno, with its here and now as well as with prospects of the future, where an important part of Group policy is production and sale of bearings for rail vehicles both of Czech Railways and of entire Euro Area.

NOK foundation itself is non-political, independent and non-profit legal entity serving solely for common good, its mission is procurement of financial and non-financial means for repairs and maintenance of historical veteran rail vehicles being in property of Czech Railways, National Technical Museum and of other bodies.

Patronage of the foundation and close cooperation with it is in hands of Ministry of Transport, Ministry of Culture, Members of Parliament of Czech Republic, among its patrons belong also artists and many other personalities.

After the session the General Director of Railway Research Institute Mr. A. Blažek, Eng. and Head of Railway Test Center in Velim Mr. M. Klofanda with the assistance of Director of ZKL Výzkum a vývoj, a. s. Mr. V. Zikmund, Eng. were acquainted with the development projects and with new investments in technologies



for top quality and economic production of special bearings for rail vehicle axles PLC 410-13/14 and PLC 410-15/16.

At the same time the situation in fulfillment the objective to acquire certification by authorized and notifiatory entity, the Railway Research Institute Praha, for bearings with polyamide cage for needs of Czech railways was reviewed.

Finally we were very pleased by thanks expressed by NOK foundation manager Mr. J. Tomeček, M.A. to all members of ZKL host team for perfect conditions under which the XIV. session of foundation was held.

Emil Effler, Eng.

TECHNICAL ADVANCEMENT OF PRODUCT BASE IN YEAR 2007

Most of project solutions in frame of technical and production advancement plan (TPA) in year 2007 were focused naturally on spherical roller bearings being the principal production program of ZKL Group. Product innovation in the said period related to five type series and to special bearings.

In respect of **radial bearings** the project solutions were made in the following series:

Innovation of 222 series continued by assortment enlargement in respect of version with steel sheet cage, particularly by launching own production of smallest dimensions 22211 up to 22213 in EW33J designation and innovation of types 22234 to 22248 in CW33J designation. In this series ZKL is offering a complex product assortment from size 22211 up to 22248, all in steel sheet cage version.

The innovation of 223 series linked to earlier finished projects by their expansion to types 22328, 30 and 32 in CW33J designation and with steel sheet cage, naturally. By this complement the whole series is being produced in the extent from 22308 up to 22332 size, all in steel sheet cage version.

Innovation of 232 series, started in year 2006, can now offer an assortment of nine dimensional types of bearings – from 23218 to 23234, all in CW33J designation, with steel sheet cage again.

In respect of 240 series the innovation projects launched out two types: 24040 with steel sheet cage CW33J and 24060 in machined brass cage version EW33MH. Thus the assortment of new products in this series was completed to totally 13 new sizes. Another five projects are in work-in-process stage.

As far as **thrust roller bearings** are concerned, the following innovations were made:

Innovation of 293 series: the earlier innovated assortment was extended by smaller bearings starting by 29322 up to 29336 size in EJ execution with steel sheet cage. Thus the offered product assortment comprises altogether 17 dimensional types starting with 29320 to 29364 size, in integrated series.

294 series innovation: 20 already innovated bearing sizes were supplemented by another two sizes – 29432 in EJ version and 294/500 in EM execution. The entire innovated assortment of this series is formed by 22 bearings from 29410 to 294/500 size.

Special bearings: in this sphere we finished the project of paired bearings for railway vehicles PLC 410-13/14 and another project of PLC 59-11 designed for transmission box of concrete ready mix trucks.

Apart of product projects in year 2007 there have been initiated solutions of technology projects of rolling down of bearing rings up to 420 mm diameter, pressing of rolling elements, bearing rings raceways grinding and centrifugal casting of semi-finished products for production of machined brass cages. These projects tie up with large investment means which will be spent by ZKL Group in the next years.

Since the year 2001 ZKL Group initiated altogether 188 projects, out of which 152 have been materialized till now.

Leoš Šilhan, Eng.

Technical & Production Manager, ZKL, a. s.

Jubilee Congratulation

Mrs. Marie Křížová, accounting and financing chief, celebrated her fiftieth birthday on January 17, 2008.



Lenka Horáková,

Assistant to General Manager, ZKL, a. s.

ZKL Brno, a. s. Jubilees

Their fiftieth birthdays celebrated Mr. Vladimír Vansa, THZ (January 13); Mrs. Věra Neveselá, worker (January 25); Mrs. Edita Gabrišová, worker (February 5); Mr. Miloš Pitauer, worker (February 14) and Mrs. Olga Uldrychová, worker (March 14).

The following employees took their retirement: Mrs. Marie Vladíková, worker (full disability pension, Jan. 4); Mr. Vladimír Ševčík, worker (early pension, Febr. 4); Mr. Jan Kren, THZ (old-age retirement, March 7).

Twenty five years in the company crowned Mrs. Dana Bradáčová, worker (on January 1) and Mrs. Iva Běhounková, THZ (on January 3).

Ilona Portešová,

Personal Dept. of ZKL Brno, a. s.

A bouquet of Roses to Hanušovice

Their fiftieth birthdays celebrated Mr. Alois Židek, welder and engineering worker in pipe shop (Febr. 9), Mr. Josef Vafek, foreman of production unit (Febr. 24) and Mr. Miroslav Moravanský, driver (March 8).

Vlasta Pavelková,

Personal Dept. of ZKL Hanušovice, a. s.

NEW PREMISES FOR ZKL BRNO, A. S. ENGINEERS



Until recently the technical section worksites were dislocated in all premises of ZKL Brno. Since March 2008 it does not apply any more. Old structures of technology, industrial processes, and NC programmers must give place to new project of chip processing system in building No. 5. Not only because of that it was decided to reconstruct the office site in eastern wing of building No. 32. After last year's opening the new women changing rooms this building will thus receive further new dwellers. In the basement floor space is reserved for complex archive of technical and design documentation which until now unnecessarily occupied room needed as administrative premises. Spaces on the second floor have been fully reconstructed at an expense of CZK 2.5 mil. to suit as office facilities representing an area of 400 sq. m. Simultaneously another area has been prepared in main building where men changing rooms will be built, to link to reconstructed offices.

After years' decades the engineers thus obtain new and very nice working environment which needs not to be hidden from visitors any more. In addition to that we expect that housing of most of engineers in one building would bring more productive work without unnecessary walking between premises. More efficient use of IT, access to copying facilities and print on central high-capacity printing machine will also result in reduction of non-productive time. The area reserved for corporate sitting room will be used also for meeting outside visitors, without necessity to pass through manufacturing sites.

It is anticipated that in the future there will be gradually established a complex background for all ZKL engineers in remaining parts of the building and the old offices in enclosures of production shops will be used for other purposes, closer to production needs.

The attached photos show areas before and after reconstruction of the building eastern wing.

Vladimír Vansa, Eng.

Technical Director, ZKL Brno, a. s.



ZKL NEWS

ZKL Group Quarterly

This issue: March 2008

Run by Editorial Board

For needs of ZKL Group published by

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Registered at Ministry of Culture of Czech Republic under Ref. No. E 11989.

Type Setting: Studio Ideal Brno

Print: T.D.V. – Vladimír Dilhof

INNOVATIONS AND NEW TYPES OF ZKL BEARINGS

In course of the period between December 2007 and February 2008 a number of projects were incorporated in technical and production advancement (TPA) plan the materialization of which is anticipated to take place in years 2008 and 2009. In the said period several projects were also finished and the innovated or new bearings were released for serial production.

Spherical roller radial bearings:

222 Series: bearing 22248 CW33J was released or serial production bearing as the first dimensional type in frame

of innovation in progress of the group 22234 up to 22248 CW33J.

230 Series: It was decided to include in TPA plan the following projects: types 23034, 23036, 23038 and 23040 in version CW33J.

232 Series: In this group the projects of dimensional types 23228, 23230 and 23234 in CW33J were accomplished and these bearings were released for serial production. The type 232/500 EW33MH was included in TPA plan as a new product which had not been manufactured in ZKL Brno, a.s. so far.

239 Series: The project of new product, type 239/710 EW33MH, was incorporated in TPA plan.

241 Series: Solution of project extending the existing series by dimensional type 24176 EW33MH was inaugurated.

Spherical roller thrust bearings:

No project solution was initiated or finished during this period.

Special bearings:

In this category we started project solution of PLC 410-13/14-2 bearing. This is an application of polyamide cage in railway bearings, till now manufactured with machined brass cage. As far as technology projects sphere is concerned the projects solving the

production of large-size bearings and special bearings, as well as pressing of rolling elements on horizontal press were incorporated in TPA plan.

In course of 2007 year 22 production projects were accomplished and another 38 projects scheduled for implementation in year 2008 or 2009 were initiated.

The attached table shows principal parameters overview of innovated or new bearings released for serial production during December 2007 – February 2008 period.

Pavel Beneš, Eng.

Technical Production Advancement, ZKL, a. s.

Bearing Designation	Boundary Dimensions				Basic Load Rating		Limiting Speed for Lubrication by		Mass	
					Dynamic	Static	Grease	Oil	Cylindrical Bore	Tapered Bore
	d	D	B	r _{s min}	C _r	C _{or}				
	(mm)	(mm)	(mm)	(mm)	(kN)	(kN)	(min ⁻¹)	(min ⁻¹)	(kg)	(kg)
22248CW33J	240	440	120	4	2050	3070	900	1200	80.0	78.2
23228CW33J	140	250	88	3	895	1370	1200	1600	18.2	17.8
23230CW33J	150	270	96	3	1040	1620	1100	1500	23.30	22.60
23234CW33J	170	310	110	4	1340	2040	950	1300	35.3	34.3

Presenting Authorized Distributors of ZKL Bearings

ZVL ITALIA S. p. A.

ZVL ITALIA S. p. A. belongs among our important bearing buyers. Its head office is in Rho, in industrial area near Milano, Italy. Its owner, Mr. Luigi Valagussa started to establish his company in year 1968. At that time in Italy there existed a ruling license system for import of bearings and it was very difficult to obtain free import limits. In the country at that time RIV establishment had been ruling the bearing industry.

The company ZVL ITALIA S. p. A. (formerly under the name F.A.I.T.) gradually became a great potential in import and sale of bearings and Mr. Luigi Valagussa started to sell ZKL brand products in year 1984. Step by step he had been granted the exclusive representation of bearing products of all bearing manufacturers in Czech Republic and in Slovakia.

The distribution base of the company in Italy was being built successively. Today it supplies our bearings to small, medium and large distributors as well. Eighty percent of sold bearings go to direct manufacturers of tractors, agricultural machines, machine tools, axles, manufacturers of transmission boxes, textile machinery, construction machines, installations of marble machining, pumps, woodworking and other production units. The object of this sale system is to reach a maximum volume of bearings sale in Italy.

The stored bearings potential of ZVL ITALIA S. p. A. company in Rho (warehouse area of 6 000 sq. m.) gives a good security of reliable service. Bearings must reach the place of installation of the final user within 24 hours from Rho store at the latest.

In year 1997 the company bought out the company ZVL AUTO Prešov (Slovakia) and became the owner of ZVL trademark.

Further years signified for ZVL ITALIA S. p. A. and for Mr. Luigi Valagussa an expansion on world market – branches were established in Miami, FAIT France was built in France and in United Kingdom and in Spain (Madrid) stores of bearings were being built.

Mother company and branches undertook for Czech and Slovak manufacturers to offer hundred percent supply service and technical assistance as well. Therefore in ZKL Brno, a.s. there are being solved various queries of Italian clients directly with technical division. ZVL ITALIA S. p. A. knows in detail each of its buyers, it concludes programmed contracts, recommends the purchase system and cooperates with clients in new products.

The attached photo shows the commercial offices and stores of the company in Milano.

Augustin Markusik, Eng.

Executive Director, ZKL Bearings CZ, a. s.



PAPEREX 2007

8TH INTERNATIONAL TRADE FAIR & CONFERENCE ON PULP, PAPER AND CONVERSION



ZKL Bearings (India) Pvt. Ltd., Kolkata are the principal authorized distributors for marketing ZKL products in the Indian market.

During the 8th International Trade Fair & Conference on Pulp, Paper and Conversion PAPEREX 2007, held at Pragati Maidan Exhibition Complex, New Delhi, the Capital of India, between 7th and 10th December, 2007, ZKL India represented the ZKL Group in this exhibition.

On display there was the entire range of bearings manufactured and marketed by ZKL. In addition,

the complementary product range of bearing accessories and maintenance products and grease were showcased in the Exhibition.

The Exhibition was well attended by almost all the familiar global and Indian operators in the field of paper and pulp. The ZKL India stall was visited by representatives of almost 100 paper manufacturing companies in India, allied Industries, component suppliers and consultants. A profusion of product literature was prepared by ZKL India for distribution amongst the visitors and the company sales engineers were swamped with queries from the potential users.

The stall was inaugurated by the general manager of ZKL Group Mr. Jiri Prášil Eng. CSc, accompanied by Deputy Executive Director of ZKL Bearings CZ, a.s. Mr. Vladimír Hrádek, They also had an opportu-

nity to interact with a cross section of Indian customers that visited the stall during the Exhibition.

The contacts picked up during the exhibition will be pursued by ZKL Bearings (India) so as to generate and conclude new commer-

cial deals and to strengthen the ZKL brand image in India in the days to come.

*D. K. Sen,
Chief Executive Officer
ZKL Bearings (India) Pvt. Ltd.,
Kolkata*



NEW ELECTRONIC CATALOGUE OF BEARINGS

ZKL is offering to its clients a new electronic catalogue of bearings completed by the end of 2007 year. The target group for which this e-catalogue is destined are designers and purchasing managers in particular – those who have direct influence on use of bearings in a final product.

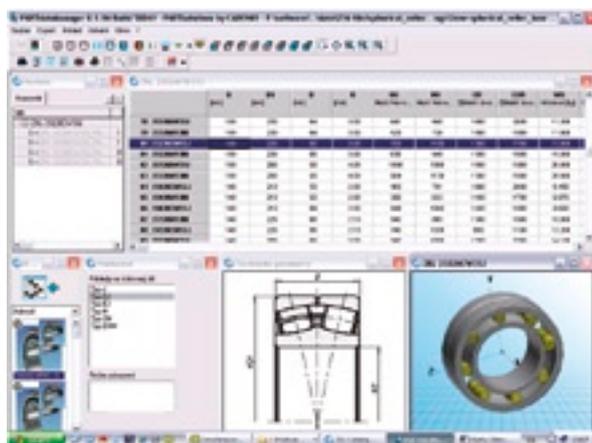
The catalogue is distributed on company CD. It allows browsing in catalogue through individual items with depiction of table values, dimensional charts and pictures of individual bearings in interactive 3D window. For easy search in the dimensional chart it is possible to filter the items by all sorts of values. The item in 3D window can be turned and enlarged at will; for getting more information of the product a sectional view can be obtained as well. Directly from CD it is possible to export fully parametric

parts in CAD neutral format (DXF, STEP, IGES, SAT).

The electronic catalogue is also accessible through internet portals PARTserver and Autodesk Supplier Content Center. Thus the information of ZKL products can reach over 2 millions of users worldwide, particularly in Europe, Russia, Asia and in some extent in USA and UK.

The picture shows a working window on PC.

*Vladimír Zikmund, Eng.
Director of ZKL-Výzkum a vývoj, a. s.*



MULTIFUNCTION MACHINING CENTER OKUMA IN ZKL HANUŠOVICE, A. S.



In connection with the decision to centralize the production of machined brass cages within ZKL the selection of a new technology representative which would associate the feasibility of all technological operations for en-bloc production of the entire spectrum of brass cages. After negotiations on exhibitions at home and abroad and after first technology tests during which we verified stability of the machine in production of pilot cage type the multifunctional machining center of Japanese company OKUMA was selected.

Having in mind the future Group projects to produce large-size bearings with machined brass cages the particular machine having optimum production capability of larger dimensions was chosen (up to the diameter of 600 mm). At present we are testing brass cages on selected aggregate comprising verification of entire specter of brass cages manufactured today with the aim to quickly switch over to series production on this machine. Brass castings of different dimensions than those which we buy now will be used in this center and we anticipate in the future to cast them ourselves in Hanušovice.

Zdeněk Rýznar, Eng. – Technical Director of ZKL Hanušovice, a. s.

IMPLEMENTING INVESTORS IN PEOPLE STANDARD IN ZKL GROUP

In November 2007 ZKL Group started the introduction of a new project within EU grant oriented to employees advancement. Its goal is to implement Investors in People Standard. It is a unique internationally accepted standard in the sphere of management and human resources development, following the company ability to efficiently utilize and develop its people and assist in their effectiveness and competitiveness. Presently the standard has 10 criterions developing three basic principles – planning, activities and evaluation.

Steps to obtain Investors in People Standard can be simply described as follows:

1. Decision of a company to introduce IIP standard – commitment to take care of human resources development;
2. Initial analysis and composition an action plan – definition of priorities

for further improvement and short-term steps;

3. Action plan execution – participation of the company and namely its employees and management in a number of seminars and courses, individual consultations etc.
4. Final evaluation;
5. Decision on certification issue;
6. Regular evaluation at least once in three years.

At this moment the materialization of approved Action Plan declared in last December is under way. Gradual introduction of individual steps is coordinated by project team consisting of employees of all ranks of company organizational structure.

Final audit, to be performed by International Quality Centre seated in UK, is planned to take place this June.

After implementing the Standard the company should be able to answer the following questions:



1. Do we have clear and measurable goals at the level of the company, particular teams and wherever necessary, even at the level of individuals?
2. Do all employees know these goals and their fulfillment?
3. Do we know which abilities and knowledge our employees must know for accomplishment of these goals?
4. Do we know which abilities and knowledge need to be improved and developed, do we have a plan of development and vocational training at the level of company, particular teams and individuals?
5. Do we know total costs of vocational training and development including costs for time spent at training e.g.?
6. Do our employees know what they should achieve by training and do they have opportunity to exercise gained knowledge in praxis?
7. Do we evaluate benefits of training and development activities and do we know whether there are any gains and which?
8. Do our managers, chiefs and foremen have necessary knowledge and ability to manage and develop their subordinates, do they exert them in comparable and undiscriminating manner?
9. Do we appreciate our people for good job and do we give them sufficient space for improvement, if necessary?
10. Do our officers review individual trainings with their subordinates – what is their goal, what are the expectations and how far they were accomplished, which are the recommendations for next time?

Zuzana Fišerová, Eng.
Staff Manager of ZKL, a. s.



The project is co-financed by European Social Fund and by Budget of Czech Republic

ZKL GROUP TRAINING CENTER

In March 2008 training courses were opened in specialized technical classrooms of ZKL Group training center.

After launching the courses in classrooms for qualification enhancement of middle management and other courses connected with introduction of new information system there also started first vocational trainings in technology and metrology classroom. The object under which the training center was estab-

lished becomes thus implemented.

The first courses in metrology for staff of metrology sections of ZKL Brno, a.s. and ZKL-



Výzkum a vývoj, a.s. are held in cooperation with tutors from Institute of Metrology and Testing at Engineering College of Brno Technical University. In March there were also initiated first courses of technologists on machines installed in the classroom. Tuition in programming and operation of numerically



controlled wire cutting machine became the first course. Installation of further machinery in technology classroom will proceed until the end of third trimester of this year.

The attached photos demonstrate some of modern installations of the training center.

Vladimír Zikmund, Eng.
Director, ZKL – Výzkum a vývoj, a. s.



Project "ZKL Group Training Center 1.3/057" is co-financed by European Fund for Regional Development and by Ministry of Industry and Trade of Czech Republic.

PRE-CHRISTMAS GATHERING OF ZKL GROUP PERSONNEL

On December 14, 2007 the traditional festive pre-Christmas gathering of ZKL Group employees connected with awarding the titles of Group year's best employees was held in representative center of Brno Technical Museum. This time the meeting was organized by ZKL, a. s. company.

After the opening speeches of Group General Manager Mr. Jiří Prášil, Eng. CSc. and Chairman Mr. Jan Otoupalik Sr., Eng. the awards of "Best Employee 2007" were presented. Besides of a bouquet and diploma all the appraised received also commemora-

tive silver medal issued for 60th anniversary of bearing production start in Brno and a financial reward.

The official part was followed by performance consisting of selections from musicals interpreted by soloists of Brno Municipal Theatre, free amusement and dance with accompaniment of Star Band group.

The attached photos depict overall view of Technical Museum premises, Group management with appraised employees, prizes presentation for individual Group companies and musicals preview.

*Lenka Horáková,
Assistant to General Manager, ZKL, a. s.*



ANNUAL SESSION OF CZECH RAILWAY INDUSTRY ACRI EXECUTIVES

In the days of November 29 and 30, 2007 the representatives of ZKL participated in annual session of the key men of Czech railway industry (ACRI) in Mělník. The VIP guests forum discussed further cooperation of this sector with representatives of Ministry of Industry and Trade, Ministry of Transport, talks were held on indispensable continuity in coordination between manufacturers, carriers and

railway network and infrastructure operators in drawing financial subsidies and grants of EU funds. Second day was devoted to two blocks of readings: "Czech Railways Development" and "Approvals of Vehicle Roadworthiness".

The photo depicts the annual VIP guests forum.

*Vladimír Zikmund, Eng.
Director, ZKL-Výzkum a vývoj, a. s.*

