



## SPHERICAL ROLLER BEARINGS



## WHY ZVL SPHERICAL ROLLER BEARINGS ?

### PERFORMANCE IN ALL INDUSTRIAL SEGMENTS

- Performance at high temperatures
- Limited maintenance
- Long bearing life
- More machine uptime
- An appreciable reduction of machine cycle costs

### A WIDE RANGE OF APPLICATION EXAMPLES

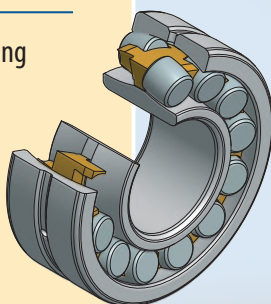
- Mining industry
- Steel industry
- Power industry
- Engineering industry
- Agriculture industry
- Paper industry

### CUSTOMER SATISFACTION

- Low operating costs in combination with high reliability
- Established european trade mark
- More than 40 years of experience in machinery industry
- Long term technical know-how
- Technical support

### GUARANTEED QUALITY

- Management quality according to ISO 9001
- Chemical analysis according to EN 683-17
- Metallographical analysis according to EN ISO 3887

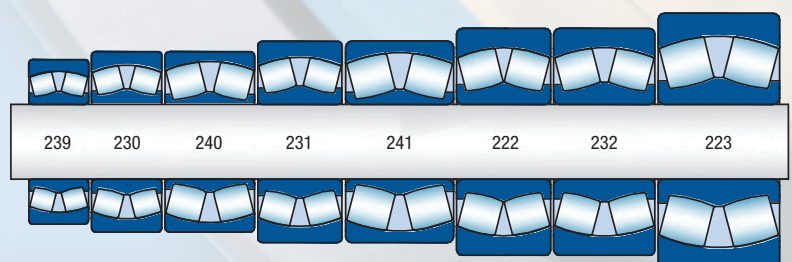
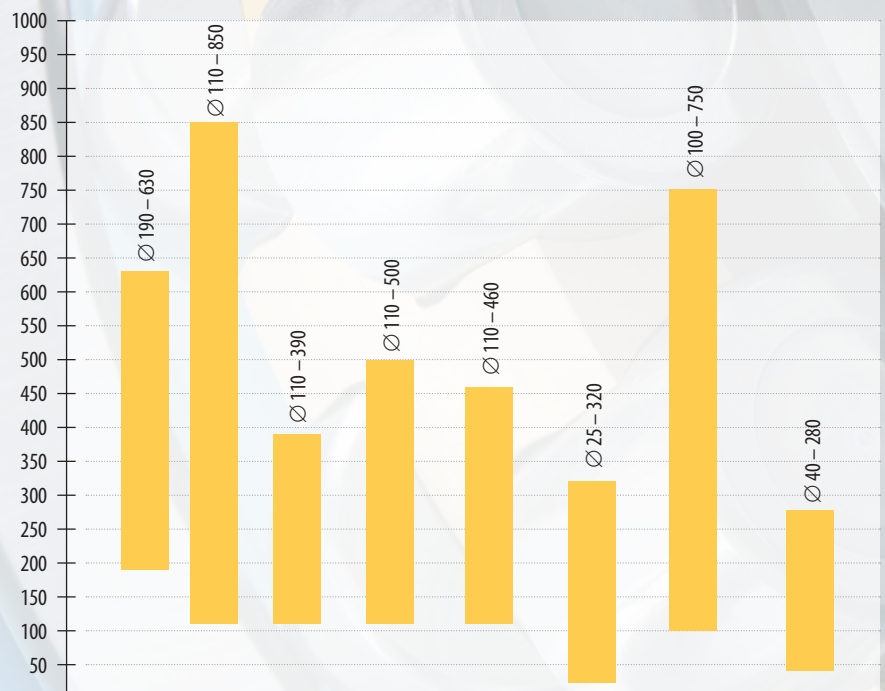


**ZVL SLOVAKIA** is an engineering company with more than 40 years of experience in bearing production. With its large range of bearings ZVL SLOVAKIA becomes an important producer recognized worldwide. We offer complex services in research, development and production of spherical roller bearings. ZVL spherical roller bearings are intended for extremely severe applications for heavy industries, agriculture, steel, power, paper and other industries. Production program includes a wide range of double row spherical roller bearings and spherical roller thrust bearings. Our customers are major OEM manufacturers from various industry markets.

## RELIABLE, HIGH PERFORMANCE BEARINGS WITH GOOD QUALITY/PRICE RATIO

### BEARING RANGE

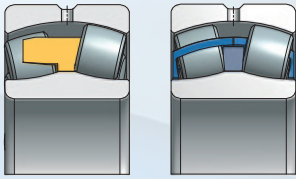
Commonly produced double row spherical roller bearings have normal radial clearance which is not indicated in bearing designation. In specific cases bearings with radial clearance C2 (smaller than normal clearance) or with the radial clearance C3, C4, C5 (greater than normal clearance) can also be produced.





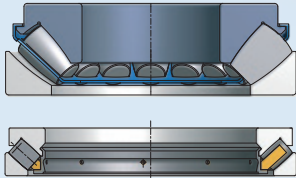


## PRODUCT INFORMATION



### DOUBLE ROW SPHERICAL ROLLER BEARINGS WITH CYLINDRICAL AND TAPERED BORE

The design with pressed **steel cage**, with floating central collar of the inner ring is marked „E...J“. The bearing with **brass cage** running on the inner ring is marked „M“.



### SPHERICAL ROLLER THRUST BEARINGS

The bearings are manufactured with **brass cage** guided by a sleeve held in the shaft washer bore. Designation of these bearings is „MC“. Another manufactured design is spherical roller thrust bearing with pressed –type **steel cage**. Their designation is EJ.

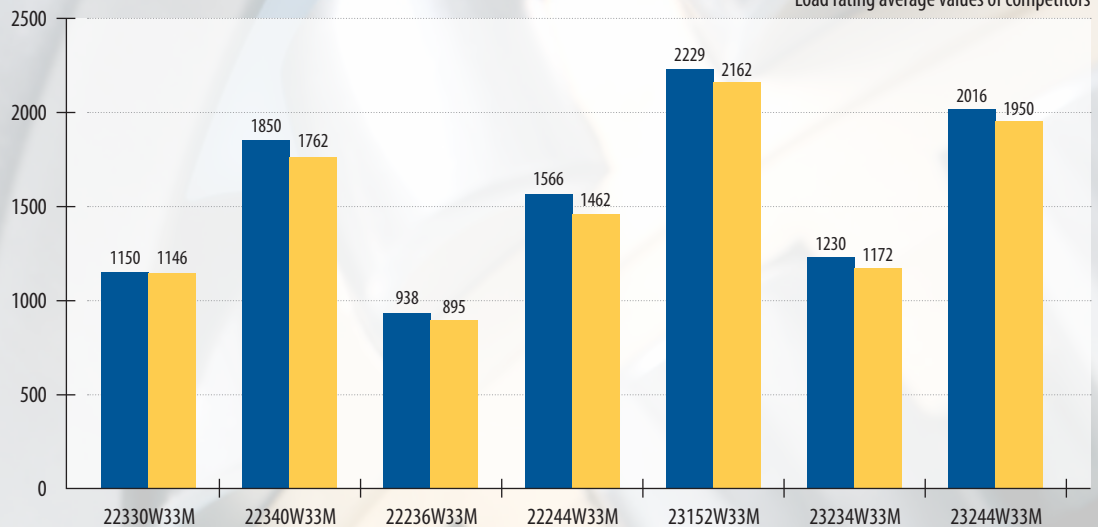
## RESULTS FROM CHEMICAL ANALYSIS OF SPHERICAL ROLLER BEARING

PART	MATERIAL	C	Mn	Si	Cr	P	S	Cu	Al	Mo
		INSTRUCTION	100Cr6	0.93	0.25	0.15	1.35	max.	max.	max.
		1.05	0.45	0.35	1.6	0.03	0.02	0.3	0.05	0.1
OUTER RING	100Cr6	0.98	0.29	0.28	1.49	0.02	0.01	0.15	0.04	0.04
INNER RING	100Cr6	1.04	0.3	0.29	1.53	0.02	0.01	0.15	0.05	0.04
ROLLER	100Cr6	0.98	0.28	0.27	1.54	0.02	0.01	0.16	0.05	0.03

„Chemical analysis of bearing conforms EN 683-17“

## COMPARISON OF LOAD RATING ZVL BRAND VS COMPETITORS

■ ZVL  
■ competitors



## REFERENCES

### MINING INDUSTRY

Dimensions:  $\varnothing$  d 70 mm to 500 mm  
 Bearing range: 222, 223, 230, 231  
 Territories: BULGARIA, POLAND, GERMANY

### POWER INDUSTRY

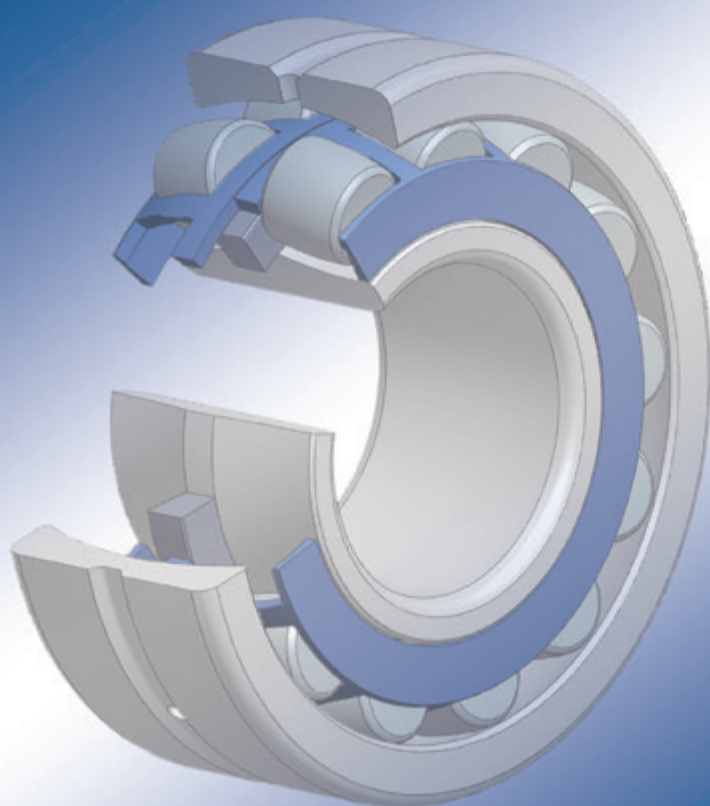
Dimensions:  $\varnothing$  d 50 mm to 400 mm  
 Bearing range: 222, 223, 230, 231, 232  
 Territories: POLAND, BULGARIA

### STEEL INDUSTRY

Dimensions:  $\varnothing$  d 100 mm to 140 mm  
 Bearing range: 222, 223  
 Territories: CZECH REPUBLIC, POLAND

### CRUSHING INDUSTRY

Dimensions:  $\varnothing$  d 85 mm to 300 mm  
 Bearing range: 222, 223, 231, 232  
 Territories: TURKEY, INDIA



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