

- BALL AND ROLLER BEARINGS
- FORGED AND MACHINED SEMI-FINISHED PARTS OF THE BEARINGS
- MORE THAN 500 TYPES OF BEARINGS WITH INNER DIAMETER FROM 16 TO 260 MM
- TRADE MARKS: HARP, HARP-AGRO, X-SHIELD, HARP AGRO UNIT, HARP-AUTO
- PRODUCTION CAPACITY: OVER 30 MLN BEARINGS A YEAR

#### BENEFITS OF COOPERATION:

#### 1 Quality and reliability

- Full technological cycle of production of ball and roller bearings "from metal to packaging"
- Quality control at every production stage
- Raw materials testing
- Rolling Bearings Test center equipped with modern control monitoring and measuring appliances
- International certification

### 2 Innovations

- Own design bureau Ukrainian
  Bearing Industry Design and
  Technology Bureau that
  specializes in designing
  of bearings for technical
  needs of customers
- The main know-hows are created in the Joint Engineering Center (JEC) of the company, including a number of specialized engineering centers and departments

# Service and technical support

- Own service department that provides efficient and professional technical support
- Service engineers team providing fast responses to customer's claims and on-site elimination of complaints

#### 4 Sales and Logistics

- Best price
- Flexible discount system delay of payment
- Anti-counterfeit protection
- Individual and group packaging
- Improved logistics









HARP.UA

# X-SHIELD — MULTI-LIP SEALS OF INCREASED TIGHTNESS

Every agrarian needs bearings for agricultural machinery, which would increase the average time of failure-free operation, minimize expensive down time and maintenance time, as well as reduce production losses.

In order to fulfill these requirements, HARP manufactures agricultural bearings with special X-SHIELD seals of increased tightness.

The line includes the existing seals with K10 suffix, as well as new types of seals with K15-K19 suffixes, which are designed for different areas and conditions of work.

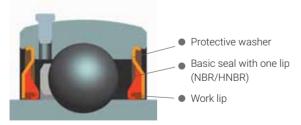


### ADVANTAGES OF X-SHIELD SEALS

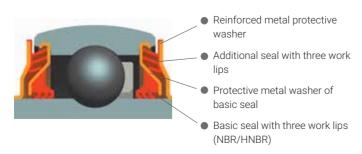
Bearing units assembled with bearings with new X-SHIELD seals do not require maintenance during the entire period of operation Unique system of multi-lip seals in combination with protective washers ensure 100% tightness of bearings Term of HARP AGRO bearing's safe operation with X-SHIELD sealing is in 2-4,5 times higher than with standard sealing Extended range of the seal operating temperatures: from -40 to +150°C (HNBR)

# 100% bearing tightness and protection against mechanical damage

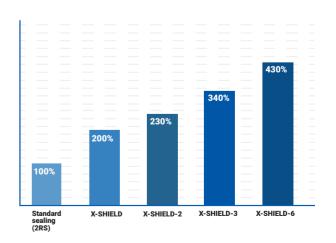
#### X-SHIELD combined seal



#### X-SHIELD-6 reinforced combined seal



Relationship between the bearing/bearing unit service life and the sealing type according to the results of field testing (Ukraine, 2017)



Field testing conducted in 2017 has shown that bearings and units with X-SHIELD sealings have **2-4,5** times longer service life than bearings with standard sealings

# **HOUSED BEARING UNITS**

One of the distinctive features of the HARP housed bearing units is the unique X-SHIELD seal, which provides reliable protection against dirt, dust and moisture, and also helps to maintain the lubrication in the bearing, which ensures maximum efficiency of the bearing, even in harsh operating conditions.



## **ADVANTAGES**

Self-alignment of the bearing outer diameter and housing inner diameter Increased service life of the bearing unit

Effective sealing X-SHIELD

High-strength cast iron housing

Device which eliminates rotation of the bearing outer ring in the housing Full interchangeability of the bearing and housing

No special requirements to the shaft mounting surface

Bearings of various series can be used



#### **APPLICATION**

Bearing units are optimized for use in tillage, seeding and harvesting implements of the world's leading manufacturers (John Deere, Case, New Holland, Lemken, etc.).

# **NEW!** MAINTENANCE-FREE BEARING UNIT

assembled with bearings sealed with X-SHIELD:





Increased durability and guarantee of long-term high-quality work of the unit 2

Extended service life

3

Minimized costs for expensive down time of the equipment and service time

## HARP AGRO UNIT

HARP AGRO UNIT is a solid maintenance-free bearing unit for tillage machinery, optimized for use in soil cultivation machinery.





High-strength forged housing

2

Simple adaptation and mounting on any tillage implement

3

Super-reliable three-level protection of the bearing 4

Reliable bearing with high-quality lubricant; no need for additional lubrication during service life 5

Possibility to restore the unit, to replace the bearing

# **EXAMPLES OF READY SOLUTIONS**



Hub assembly 8395.H5-160.47.f35.011

For disc harrow Lemken Rubin 9
Analogues: Lemken: 5554502, 55554503, 55510014, 55510015
FKL: PL-185-V30



Bearing unit 8395.H4-98.65.l28.014/ 8595.H4-98.80.l28.014

For agricultural machinery: Great Plains, Quivogne, Agrisem, Einböck, Gregoire Besson, Köckerling, Rabe, Vogel&Noot, Farmet, Bednar

Analogues: SKF: BAA-0004; BAA-0012; BAA-0006 FKL: IL-117-M22; IL-117-M22-D; IL2-117-M22-G; IL2-117-M22-I



Bearing unit 8395.H5-106.106.f55.014

For compact disc harrows Horsch Joker Analogues: Horsch: 28085600 FKL: PL-127

# **APPLICATION**

HARP AGRO UNIT is used with discs of different diameters in a wide range of tillage agricultural machinery: cultivators and harrows, sowing complexes and other.

Full compatibility with common lines of machines: Lemken, Great Plains, Quivogne, Agrisem, Einböck, Gregoire Besson, Köckerling, Rabe, Vogel & Noot, Farmet, Bednar, HORSCH, Väderstad, Gaspardo and others.

UPEC TRADING – official distributor of Kharkov Bearing Plant (HARP)

4, Marshal Batitskiy Str., Kharkov, 61038, Ukraine

hone: +38 (057) 711-60-10; 710-10-59; +38 (050) 302-24-40

