

# HYDRAULIC CRUSHERS & GRABS



WHERE **EXPERIENCE COUNTS**

# VR-ER SERIES

## SCRAP SHEAR - VR-ER SERIE -

FRD scrap shears are used for demolition of complete steel constructions as well as for reducing on the ground in foundries, garbage dumps and waste recycling. These Hardox 400 machines are manufactured in FRD quality, which means that safety and reliability is promised in even in the toughest applications.

- Extremely stable housing with low weight
- Speed valve for quick and efficient work
- Blade with trapezoidal profile improves the cutting line
- Innovative adjuster on the jaw
- Replaceable wear parts



|                               |       | VR4ER    | VR7ER    | VR15ER    | VR18ER-2  | VR30ER-3  | VR-40ER3  | VR50ER-3  | VR68ER-3  | VR80ER-3  |
|-------------------------------|-------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Total length                  | mm    | 1855     | 2080     | 2277      | 2666      | 3227      | 3726      | 3690      | 4338      | 4450      |
| Jaw depth                     | mm    | 348      | 348      | 481       | 510       | 606       | 710       | 720       | 852       | 1200      |
| Jaw opening                   | mm    | 350      | 415      | 450       | 480       | 575       | 670       | 740       | 830       | 870       |
| Cutting force back            | kN    | 1250     | 2100     | 2750      | 4000      | 6200      | 7300      | 8900      | 10000     | 12000     |
| Cutting force front           | kN    | 320      | 600      | 610       | 950       | 1460      | 1650      | 1950      | 2200      | 2400      |
| Round material                | mm    | 30       | 40       | 45        | 55        | 65        | 70        | 75        | 85        | 100       |
| Square material               | mm    | 25       | 30       | 35        | 40        | 50        | 55        | 60        | 70        | 85        |
| Flat material                 | mm    | 6        | 8        | 10        | 15        | 20        | 22        | 25        | 30        | 35        |
| IPE-Profile                   | mm    | 100      | 120      | 200       | 300       | 400       | 450       | 500       | 550       | 600       |
| H-Profile                     | mm    | 70       | 80       | 140       | 200       | 260       | 280       | 320       | 360       | 400       |
| Oil flow (rotation)           | l/min | 5 - 8    | 5 - 8    | 20 - 30   | 20 - 30   | 20 - 30   | 20 - 30   | 40 - 50   | 40 - 50   | 40 - 50   |
| Operating pressure (rotation) | MPa   | 12       | 12       | 12        | 12        | 12        | 12        | 12        | 12        | 12        |
| Rotation                      |       | 360°     | 360°     | 360°      | 360°      | 360°      | 360°      | 360°      | 360°      | 360°      |
| Oil flow                      | l/min | 70 - 110 | 90 - 140 | 150 - 250 | 200 - 300 | 280 - 350 | 300 - 450 | 350 - 500 | 400 - 600 | 500 - 800 |
| Operating pressure            | MPa   | 20 - 25  | 28 - 32  | 35        | 35        | 35        | 35        | 35        | 35        | 35        |
| Operating weight              | kg    | 435      | 770      | 1190      | 2120      | 3260      | 4200      | 5000      | 6820      | 8100      |
| Excavator (boom top)          | t     | 2 - 6    | 5 - 8    | 8 - 14    | 14 - 20   | 20 - 30   | 25 - 40   | 30 - 50   | 40 - 60   | 50 - 80   |
| Excavator (stick)             | t     | 5 - 8    | 8 - 14   | 13 - 20   | 19 - 28   | 27 - 39   | 32 - 45   | 38 - 55   | 50 - 70   | 70 - 110  |

Specifications subject to change without notice..

WHERE EXPERIENCE COUNTS

# VR-ER SERIES

|                               |       | VR100ER-3  | VR150ER-3  | VR200ER-3   |
|-------------------------------|-------|------------|------------|-------------|
| Total length                  | mm    | 5360       | 6200       | 7100        |
| Jaw depth                     | mm    | 1320       | 1600       | 1700        |
| Jaw opening                   | mm    | 1004       | 1145       | 1225        |
| Cutting force back            | kN    | 13200      | 16000      | 17000       |
| Cutting force front           | kN    | 2800       | 3550       | 4600        |
| Round material                | mm    | 110        | 140        | 165         |
| Square material               | mm    | 90         | 120        | 140         |
| Flat material                 | mm    | 40         | 45         | 50          |
| IPE-Profile                   | mm    | 750        | 950        | 1100        |
| H-Profile                     | mm    | 550        | 600        | 750         |
| Oil flow (rotation)           | l/min | 80 - 100   | 80 - 100   | 80 - 100    |
| Operating pressure (rotation) | MPa   | 12         | 12         | 15          |
| Rotation                      |       | 360°       | 360°       | 360°        |
| Oil flow                      | l/min | 700 - 1000 | 900 - 1200 | 1000 - 1500 |
| Operating pressure            | MPa   | 35         | 35         | 35          |
| Operating weight              | kg    | 10200      | 15100      | 20900       |
| Excavator (boom top)          | t     | 60 +       | 80 +       | 110 +       |
| Excavator (stick)             | t     | 85 +       | 120 +      | 170 +       |



|      | VR15ER  | VR18ER-2 | VR30ER-3 | VR40ER-3 | VR50ER-3 | VR68ER-3 | VR80ER-3 | VR100ER-3 | VR150ER-3 |
|------|---------|----------|----------|----------|----------|----------|----------|-----------|-----------|
| 150  | 4,1/1,6 |          |          |          |          |          |          |           |           |
| 200  | 3,1/1,2 | 2,8/2,8  |          |          |          |          |          |           |           |
| 250  | 2,4/1,0 | 2,2/2,2  | 3,0/4,9  |          |          |          |          |           |           |
| 300  |         | 1,8/1,8  | 2,5/4,1  | 3,1/5,1  |          |          |          |           |           |
| 350  |         |          | 2,1/3,5  | 2,7/4,3  | 3,9/5,5  |          |          |           |           |
| 400  |         |          |          | 2,3/3,8  | 3,4/4,8  | 4,4/6,1  |          |           |           |
| 450  |         |          |          | 2,1/3,4  | 3,0/4,3  | 3,9/5,5  |          |           |           |
| 500  |         |          |          |          | 2,7/3,8  | 3,5/4,9  | 3,9/6,0  |           |           |
| 600  |         |          |          |          |          | 2,9/4,1  | 3,3/5,0  |           |           |
| 700  |         |          |          |          |          |          | 2,8/4,2  | 3,6/5,6   |           |
| 800  |         |          |          |          |          |          | 2,4/3,7  | 3,2/4,9   |           |
| 900  |         |          |          |          |          |          |          | 2,8/4,3   | 4,4/6,0   |
| 1000 |         |          |          |          |          |          |          | 2,5/3,9   | 4,0/5,4   |
| 1100 |         |          |          |          |          |          |          |           | 3,6/4,9   |
| 1200 |         |          |          |          |          |          |          |           | 3,3/4,5   |

Specifications subject to change without notice.

# RC22ER SERIES

## RAIL CUTTER - RC22ER -

The European railway covers approximately 350.00 km. The construction and maintenance of railway tracks is an important market. To respond to the ever growing demand for cutting railroad tracks, FRD presents their first rail cutter model.

The RC22ER is designed for use on excavators from 21 to 35 ton operating weight. The RC22ER is used to cut high tensile bars.

Extreme long service and maintenance intervals have been achieved. The complete body of the RC22ER is made of Hardox and has undergone a special heat treatment so that the body is produced entirely free of tension. A higher mechanical strength is ensured.



|                                    |       | RC22ER    | RC44ER    |
|------------------------------------|-------|-----------|-----------|
| Length                             | mm    | 2320      | 2320      |
| Cutter length                      | mm    | 170       | 170       |
| Jaw opening                        | mm    | 225       | 240       |
| Width                              | mm    | 540       | 600       |
| Oil flow rotation                  | l/min | 25 - 35   | 25 - 35   |
| Operating pressure rotation        | MPa   | 19        | 19        |
| Oil flow opening/closing           | l/min | 200 - 300 | 300 - 450 |
| Operating pressure opening/closing | MPa   | 35        | 35        |
| Weight                             | kg    | 2480      | 3900      |
| Excavator size                     | t     | 21 - 35   | 35 - 50   |

Specifications subject to change without notice.

WHERE EXPERIENCE COUNTS

# DEALER NETWORK

## LOCAL SERVICE AND SUPPORT

FRD seeks firstly to supply a product of undoubted integrity. Then back this up with a support network of dedicated Distributors to ensure whatever support, wherever and whenever needed. The FRD-Distributor combination has been made unbeatable.

FRD Distributors have been selected for their professional competence, their market coverage, their dedication to quality and their willingness to work. They receive intense training on all machines and systems and every support that a committed manufacturer can give them. They actively exchange experience between each other to ensure their clients get the latest lessons from the market. They are a skilled and fast team of professionals.

## VALUE FOR MONEY

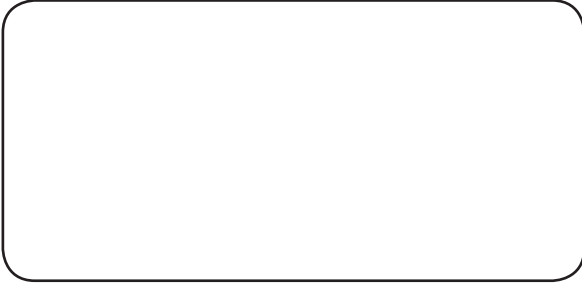
Buying FRD products is a smart investment. Top quality for a reasonable price, with long lifetime, with low maintenance and less break-down-time. In the long term this choice makes financially better results.

Next steps? FRD Europe and its Distributors have a vast resource of information beyond what can be mentioned here. Do not hesitate to get in touch for more detail and an unbeatable quote.



WHERE EXPERIENCE COUNTS

**Authorized distributor:**



**Furukawa Rock Drill Europe BV**

Proostwetering 29, 3543 AB Utrecht, The Netherlands  
Phone +31-(0)30-2412277 - frd@frd.eu / www.frd.eu



WHERE **EXPERIENCE COUNTS**