Face Drilling Jumbos
Product Overview
At Joy Global, everything starts with a singular focus on mining. Our unique business model in the mining industry, centered on a direct service approach, allows our customers to deal directly with our company representatives, in an intimacy model with no middleman or dealership operations intermediating discussions. Our experienced people and high quality services are close to the mines to provide better decisions and solutions.

Joy Global is continually investing in research and development in order to deliver technology products that will revolutionize mining. Our resources are committed to developing methods and solutions focused on higher productivity and reliability and safer operations.

Face Drilling Jumbos

Joy Global delivers a full line of heavy duty development and production drilling jumbos for mining and tunneling. Combined with Montabert HC series drifters, the Joy NV-1, Vein Runner II, Drift Runner and Ramp Runner jumbo drills continue to lead the industry in reliability and performance. Optional ROPS/FOPS certified environmentally controlled cabs allow the operator to be more comfortable, productive and secure from all forms of hazards. EPA and MSHA certified engines are available on all Joy hydraulic jumbo drills, demonstrating our commitment to a cleaner, safer environment. The Joy Global jumbo line is designed to operate in the harshest conditions of underground mining and can drill horizontal, vertical or cross-cut holes. Designed for operator comfort, these units can accommodate all different ground conditions.

A long list of innovative features sets Joy jumbo drills apart from the rest.

- Montabert HC Series Drifter & Intelsense Drilling Control System
  The Montabert HC series drifter and Intelsense drilling control system work seamlessly with all joy jumbos, ensuring the best possible drilling performance.

- Powertrain & Hydraulics
  In an effort to improve underground air quality, joy jumbos are available with EPA and MSHA certified engines. A heavy-duty all-mechanical powertrain with load-sensing hydraulics ensures a proven platform and a long service life.

- Environment Controlled ROPS/FOPS Certified Cabs (Optional)
  The ROPS/FOPS certified environmentally controlled operator’s cab insulates the operator from noise, dust and vibration.

- Lightweight Aluminum JGF Feed with Replaceable Wear Strips
  The Joy Global Feed (JGF) is a lightweight aluminum extrusion using a hydraulic cylinder cable feed design. JGF feeds are operator and mechanic friendly. The JGF feed comes in different lengths to accommodate a range of steel from 8 ft (2.4 m) to 16 ft (4.87 m) and features replaceable wear rails and guides. Used with either the SB, MB, LB, or JGB series booms, the JGF feed is designed for fast accurate holes.

- Booms
  Designed for harsh underground environments, these booms come with an automatic parallelism feature that is designed into the hydraulic system of the booms.
Drift Runner 1 SB Jumbo

The Joy Drift Runner series single-boom hydraulic rig is designed for drilling vertical, horizontal and angled holes in underground production or development headings. It features one hydraulic percussion drifter designed to drive headings 5.46 m by 5.46 m (17 feet 11 inches by 17 feet 11 inches).

Standard Features
- Montabert HC 50 percussion drifter
- Montabert Intelsense drilling control
- JGF Feed c/w replaceable wear strips
- Dana R20000 transmission c/w torque converter
- EPA & MSHA certified engines
- 45 kW (60 hp) electric motor driving pumps for percussion/rotation
- Direct lever controls
- Boom parallelism

Options
- Montabert HC 109 drifter (56 kW / 75 hp electric motor)
- Montabert HC 110 drifter (74.5 kW / 100 hp electric motor)
- Optional feed lengths
- ROPS/FOPS cab with climate control
- Telescopic ROPS/FOPS canopy
- Automatic lubrication system
- Engine options
- Fire suppression system
- Tire options
- Air compressor
- Water booster

General Specifications

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<thead>
<tr>
<th>DR-1 SB Jumbo</th>
<th>DR-2 SB Jumbo</th>
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<tr>
<td>Weight</td>
<td>14,880 kg</td>
</tr>
<tr>
<td>Maximum Width</td>
<td>32,800 lbs</td>
</tr>
<tr>
<td>Turning Radius</td>
<td>2.06 m</td>
</tr>
<tr>
<td>Inside</td>
<td>4.19 m</td>
</tr>
<tr>
<td>Outside</td>
<td>6.48 m</td>
</tr>
<tr>
<td>Turning Angle</td>
<td>38°</td>
</tr>
<tr>
<td>Boom Guide Rollover</td>
<td>360°</td>
</tr>
<tr>
<td>Boom Extension</td>
<td>914 mm</td>
</tr>
<tr>
<td>Feed Extension</td>
<td>1.52 m</td>
</tr>
<tr>
<td>Boom Coverage</td>
<td>1.52 m</td>
</tr>
<tr>
<td>Height</td>
<td>5.46 m</td>
</tr>
<tr>
<td>Width</td>
<td>5.46 m</td>
</tr>
<tr>
<td>Drifter</td>
<td>Montabert HC 50</td>
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<tr>
<td>Tires</td>
<td>12.00 x 20</td>
</tr>
<tr>
<td>Cable Reel - Type G-GC</td>
<td>76.2 m</td>
</tr>
</tbody>
</table>

Drift Runner 2 SB Jumbo

The Joy Drift Runner series two-boom jumbo is designed for drilling vertical, horizontal and cross-cut holes in underground production and development headings. It features two hydraulic percussion drifters designed to drive headings 5.49 m by 7.04 m (18 feet by 23 feet 1 inch).

Standard Features
- Montabert HC 50 percussion drifters
- Montabert Intelsense drilling controls
- JGF Feed c/w replaceable wear strips
- Dana R20000 series transmission c/w torque converter
- EPA & MSHA certified engines
- 45 kW (60 hp) electric motors driving pumps for percussion, rotation & high pressure
- Direct lever controls
- Boom parallelism

Options
- Montabert HC 109 drifter (56 kW / 75 hp electric motor)
- Montabert HC 110 drifter (74.5 kW / 100 hp electric motor)
- Optional feed lengths
- ROPS/FOPS cab with climate control
- Telescopic ROPS/FOPS canopy
- Automatic lubrication system
- Engine options
- Fire suppression system
- Tire options
- Air compressor
- Water booster
Ramp Runner 1 MB Jumbo

The Joy Ramp Runner series one-boom hydraulic rig is designed for drilling vertical, horizontal and cross-cut holes in underground production and development headings. It features one hydraulic percussion drifter designed to drive headings 6.07 m by 5.69 m (19 feet 11 inches by 18 feet 8 inches).

Standard Features
- Montabert HC 50 percussion drifter
- Montabert Intelsense drilling controls
- JGF feed c/w replaceable wear strips
- Dana R20000 series transmission c/w torque converter
- EPA and MSHA certified engine
- 45 kW (60 HP) electric motor driving pumps for percussion, rotation & high pressure
- Direct lever controls
- Boom parallelism

Options
- Montabert HC 109 drifter
  (56 kW / 75 hp electric motor)
- Montabert HC 110 drifter
  (74.5 kW / 100 hp electric motor)
- Optional feed lengths
- ROPS/FOPS cab with climate control
- Telescopic ROPS/FOPS canopy
- Automatic lubrication system
- Engine options
- Fire suppression system
- Tire options
- Air compressor
- Water booster

Ramp Runner 2 MB Jumbo

The Joy Ramp Runner series two-boom hydraulic rig is designed for drilling vertical, horizontal and cross-cut holes in underground production and development headings. It features two hydraulic percussion drifters designed to drive headings 6.07 m by 8.28 m (19 feet 11 inches by 27 feet 2 inches).

Standard Features
- Montabert HC 50 percussion drifters
- Montabert Intelsense drilling controls
- JGF feed c/w replaceable wear strips
- Dana R20000 transmission c/w torque converter
- EPA and MSHA certified engines
- 45 kW (60 HP) electric motors driving pumps for percussion, rotation & high pressure
- Direct lever controls
- Boom parallelism

Options
- Montabert HC 109 drifter
  (56 kW / 75 hp electric motor)
- Montabert HC 110 drifter
  (74.5 kW / 100 hp electric motor)
- Optional feed lengths
- ROPS/FOPS cab with climate control
- Telescopic ROPS/FOPS canopy
- Automatic lubrication system
- Engine options
- Fire suppression system
- Tire options
- Air compressor
- Water booster

General Specifications

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<tr>
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<th>RR-1 MB Jumbo</th>
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<td>Weight</td>
<td>16,545 kg</td>
<td>19,780 kg</td>
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<td>Max. Width</td>
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<td>2.16 m</td>
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<tr>
<td>Turning Radius</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inside</td>
<td>4.19 m</td>
<td>3.76 m</td>
</tr>
<tr>
<td>Outside</td>
<td>6.48 m</td>
<td>6.68 m</td>
</tr>
<tr>
<td>Turning Angle</td>
<td>38°</td>
<td>38°</td>
</tr>
<tr>
<td>Boom Guide Roll</td>
<td>360°</td>
<td>360°</td>
</tr>
<tr>
<td>Boom Extension</td>
<td>1219 mm</td>
<td>1217 mm</td>
</tr>
<tr>
<td>Feed Extension</td>
<td>1524 mm</td>
<td>1524 mm</td>
</tr>
<tr>
<td>Boom Coverage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>6.07 m</td>
<td>6.07 m</td>
</tr>
<tr>
<td>Width</td>
<td>5.69 m</td>
<td>8.28 m</td>
</tr>
<tr>
<td>Drifter</td>
<td>Montabert HC 50</td>
<td>Montabert HC 50 (2)</td>
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<td>Tires</td>
<td>12.00 x 20</td>
<td>12.00 x 20</td>
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<tr>
<td>Cable Reel - Type G-GC</td>
<td>76.2 m</td>
<td>76.2 m</td>
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</table>
Vein Runner II
Hydraulic Drill Jumbo

The Joy Vein Runner series single-boom hydraulic rig is designed for drilling vertical, horizontal and angled holes in underground production or development headings. It features a hydraulic percussion drifter designed to drive headings 5.77 m by 5.1 m (18 feet 11 inches by 16 feet 9 inches).

Standard Features
- Heavy duty all mechanical powertrain
- Montabert HC 50 percussion drifter
- JGB series boom
- Montabert Intelsense drilling control
- Lightweight aluminum JGF feed
- Dana R20000 transmission with torque converter
- EPA & MSHA certified engines
- 45 kW (60 hp) electric motor driving pumps for percussion/rotation
- Direct lever controls
- Boom parallelism

Options
- Montabert HC 109 percussion drifter
- Montabert HC 110 percussion drifter
- Optional feed lengths
- ROPS/FOPS cab with climate control
- Telescopic ROPS/FOPS canopy
- Diesel Drilling
- Engine options
- Fire suppression system
- Large protective operators compartment
- Rail mounted
- Air compressor
- Water booster

NV-1
Hydraulic Drill Jumbo

The Joy NV-1 series single-boom hydraulic rig is designed for narrow vein drilling, from vertical to horizontal and angled holes in underground production or development headings. It features one hydraulic percussion drifter designed to drive headings 3 m by 3 m (10 feet by 10 feet).

Standard Features
- Hydrostatic drive & carrier
- Montabert HC 20 percussion drifter
- JGB series boom
- Montabert Intelsense drilling control
- Lightweight aluminum JGF feed
- EPA certified engines
- 45 kW (60 hp) electric motor driving pumps for percussion/rotation
- Direct lever controls
- Boom parallelism

Options
- Montabert HC 25 percussion drifter
- Montabert HC 50 percussion drifter
- Optional feed lengths
- ROPS/FOPS cab with climate control
- Telescopic ROPS/FOPS canopy
- Diesel Drilling
- Engine options
- Fire suppression system
- Air compressor
- Water booster

General Specifications

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<td>24,100 lbs</td>
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<tr>
<td></td>
<td>4 ft 8 in</td>
<td>3 ft 6 in</td>
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<tr>
<td>Turning Radius</td>
<td></td>
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<tr>
<td>Inside</td>
<td>3.05 m</td>
<td>2.61 m</td>
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<tr>
<td></td>
<td>10 ft</td>
<td>8 ft 7 in</td>
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<tr>
<td>Outside</td>
<td>5.05 m</td>
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<td></td>
<td>16 ft 8 in</td>
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<td>Boom Guide Rollover</td>
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<td>360°</td>
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<tr>
<td>Boom Extension</td>
<td>914 mm</td>
<td>914 mm</td>
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<tr>
<td></td>
<td>36 in</td>
<td>36 in</td>
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<tr>
<td></td>
<td>48 in</td>
<td>36 in</td>
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<td>Boom Coverage</td>
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<tr>
<td>Height</td>
<td>5.1 m</td>
<td>3 m</td>
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<td></td>
<td>16 ft 9 in</td>
<td>10 ft</td>
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<tr>
<td>Width</td>
<td>5.77 m</td>
<td>3 m</td>
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<tr>
<td></td>
<td>18 ft 11 in</td>
<td>10 ft</td>
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<td>Drifter</td>
<td>Montabert HC 50</td>
<td>Montabert HC 20</td>
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<td>Tires</td>
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<td>8.25 x 15</td>
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<td>76.2 m</td>
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<tr>
<td></td>
<td>250 ft</td>
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Montabert Drifters

Joy Global offers Montabert HC 20, HC 25, HC 50, HC 109 and HC 110 drifters on all Joy hydraulic drill jumbos. Combined with Intelsense drilling controls, Joy jumbos have the highest availability and the fastest drilling rates in the industry.

The workhorse of any drill rig is the drifter. The Montabert HC series can provide our customers the lowest cost for drilling maintenance and consumables.

Joy Global also offers drifter conversion program to retrofit Montabert drifters on other manufacturer’s units.

Montabert Drifter Range

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<thead>
<tr>
<th></th>
<th>HC 20</th>
<th>HC 25</th>
<th>HC 50</th>
<th>HC 109</th>
<th>HC 110</th>
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<td>62-71</td>
<td>71</td>
<td>102</td>
<td>142 (313)</td>
<td>200 (441)</td>
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<tr>
<td>(lbs)</td>
<td>(137-157)</td>
<td>(157)</td>
<td>(225)</td>
<td>170 (375)</td>
<td>229 (505)</td>
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<tr>
<td>Piston Weight daN</td>
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<td>2</td>
<td>3.4</td>
<td>6.3</td>
<td>6.3</td>
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<tr>
<td>Percussion Output</td>
<td>5</td>
<td>9</td>
<td>13</td>
<td>18</td>
<td>33</td>
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<tr>
<td>Power kW</td>
<td></td>
<td></td>
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<tr>
<td>Percussion Flow/Press L/mn (bar)</td>
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<td>65</td>
<td>105</td>
<td>135</td>
<td>135</td>
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<tr>
<td></td>
<td>(140)</td>
<td>(150)</td>
<td>(130)</td>
<td>(135)</td>
<td>(135)</td>
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<tr>
<td>Applications</td>
<td>Surface drilling</td>
<td>Mining, bolting</td>
<td>Mining, bolting</td>
<td>Mining, bolting, long holes</td>
<td>Mining, bolting, long holes</td>
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Contact your Joy Global service representative for more information on face drilling jumbos or visit www.joyglobal.com