



MORI SEIKI

Driven Tools with Ultimate Performance

PROVEN PERFORMANCE

87% of our tools since 2001 are still in the field, without a single repair.

94% of test tool programs result in customer purchases.

100% satisfaction guarantee. Flexibility and Partnership is our only way.



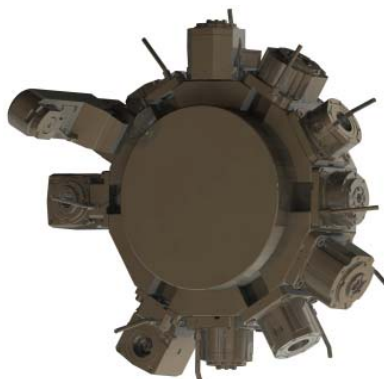
HYDRAULIC & POWER TRANSMISSION

Von Ruden Driven Tools are designed for years of life. As the only manufacturer who combines over 60 years of power transmission, gearbox and bearing expertise with over 30 years of hydraulic and seal expertise, it is no wonder why these tools will continue to run long after the competition. Rest assure, these tools are designed, built and tested to the highest industry standards for the ultimate performance in milling capability.



THROUGH TOOL COOLANT PRESSURE

Von Ruden Driven Tools are designed for years of life. Eventually, a repair will be required including the failure of the internal high pressure seal mechanism. All tools have PRESSURE RELIEFS and DRAINS for when such a failure presents itself. This standard design feature moves the coolant out of the tool and above the turret mounting area thus reducing any potential damage to the turret.



DESIGN, MANUFACTURED AND SUPPORTED IN USA

Von Ruden Driven Tools are design for years of life. 48 HOUR service and repair to keep your machines running as efficiently as possible. Specials that are supplied within your project time allotted. Kennametal Quick Change or Rego-Fix ER collet systems to meet your application needs. Sales staff that visits you when you need assistance. Von Ruden is a proven supplier for over 60 years. As a customer of these products too, we understand your needs are the same as ours. Reliability! Performance! Support!





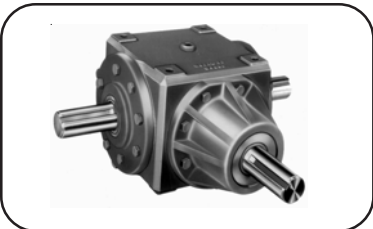
Von Ruden Manufacturing, Inc.
 1008 First Street N.E.
 Buffalo, MN 55313 U.S.A.
 Phone: (763) 682-3122
 Fax: (763) 682-3954
 Internet: www.vonruden.com

HYDRAULIC AND MECHANICAL DRIVE COMPONENTS

Fluid Power, Power Train, Custom Products

Von Ruden Manufacturing, Inc.

GEAR BOXES



o RIGHT ANGLE BEVEL

- 13 model families.
- Spiral, straight and forged gears
- Ratios 1-1:3 to 1-3:1, up to 200 HP.
- SAE, NEMA or shaft inputs and outputs



o MACHINE TOOL

- Live and static tooling.
- Tools maximized to machine parameters.
- Industry standard clamping systems.
- Ratios 1:1, 1:2 & 2:1, specials available.



o PARALLEL REDUCERS

- Two model families.
- Helical gears.
- Ratios 1:1 to 25.96:1, up to 277 HP.
- SAE and shaft inputs, variety of outputs.

HYDRAULIC MOTORS



o ROL-SEAL®

- Low and high speed, high torque.
- Smooth, highly efficient starting torque.
- To 10 in.³, 3,500 RPM, 3,750 PSI.
- W/ Integral brake, planetary gearbox.



o MRS ROL-SEAL®

- High speed, high pressure.
- Increased bearing support.
- To 1 in.³, 7,000 RPM, 5000 PSI.
- W/ HP seal, integral bearing block.



o AXIAL VANE (SERVO GRADE)

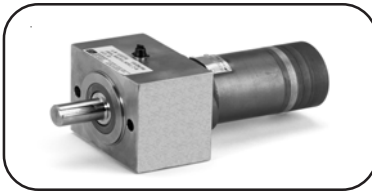
- Very low and high speed, high torque.
- Smooth, precise repeatable positioning.
- To 7 in.³, 3,000 RPM, 3,000 PSI.
- W/ Integral brake, planetary gearbox.

HYDRAULIC MOTOR PACKAGES OR ACCESSORIES



o INTEGRAL BRAKE

- Compact and cost effective package.
- Static, rear mounted, normally-on.
- Integral w/ Von Ruden® motors.



o OVERHUNG LOAD ADAPTOR

- 7 model families.
- Higher side/thrust loading, increase life.
- 5/8" - 1 3/4" keyed shafts and splines.
- SAE 'A' - SAE 'C-C' or special mounts.



o PLANETARY GEAR BOX

- 9 model families.
- To 3,000 RPM, 1,000,000 lb-in.
- Ratios 4:1 to 90,000:1.
- Single to quad stage reductions.

CUSTOM MACHINING

As an established Products Manufacturer with the goal of being a world class manufacturer, we can assure quality results with your parts and/or assemblies. Flexible facility, equipment, processes and team members that adjust to your changing requirements. J.I.T. delivery and fast response in small or large lot fabrication. Flexible manufacturing system (F.M.S.) and cellular manufacturing for competitive pricing with minimal set-up cost to reduce your inventory dollars for the best value in service. Self directed work teams are involved, empowered and flexible insuring your satisfaction. Manufacturing engineering support along with design engineering available for optimum results. Quality assurance systems and teams to support your quality requirements. Full service materials team of purchasing, production and inventory control with shipping/receiving committed to continuous improvements using the latest equipment and methods for improved service. Assembly, testing and R & D facilities available to support proper results.