## ROSCOE CAPABILITIES

Delivering the Difference with the company most qualified to handle all your gearing needs.



## HORSBURGH & SCOTT

**DELIVERING THE DIFFERENCE** 

# Over 150 Years of Industry Leadership

Horsburgh & Scott has over 150 years of engineering expertise in high torque, large gear drive systems. We use the world's most advanced gear cutting equipment and can duplicate virtually any gear geometry.





## A Complete Range of Gearing Solutions

Roscoe has the capability to manufacture a wide range of parallel axis and beveloid gears in-house, with sizes ranging from 1" to 72" and up to 1.5 DP for hobbed gears. We can also precision grind gears up to 60" in diameter. Additionally, we offer worm gear cutting capabilities if samples or drawings can be provided.

## **MACHINING SERVICES**

#### **CNC SHAFT TURNING**

• CNC up to 27" diameter x 50" long shafts

#### **CNC VERTICAL TURNING**

• Up to 40" max diameter x 32" face length

#### MANUAL LATHE TURNING

• Up to 18" diameter x 120" long

#### MILLING

• Up to 50" x 60" x 43"





## **TOOTH CUTTING**

#### SHAFT HOBBING

- Up to 16" OD x 56" long (6 DP max - 25 DP min)
- Shaft diameters less than 4" diameter max length up to 200"
- Teeth need to be less than 56" from the end of the shaft

#### **GEAR HOBBING**

 Up to 72" OD x 30" face length (1.50 DP - 25 DP min)

#### SHAPING

- Up to 36" OD and 8" stroke length
- Max height 18"

#### BROACHING

- Up to 16" diameter x 36" long with a .75 min bore
- Up to 40 tons



### **GRINDING SERVICES**

#### CYLINDRICAL GRINDING

#### **ID GRINDING**

• Up to 34" diameter x 18" face length

#### OD GRINDING

• Up to 16" diameter x 60" long

#### SURFACE GRINDING

#### LINEAR GRINDING

• 4" wide x 72" long x 20" high

#### **ROTARY GRINDING**

• Up to 24" diameter x 12" tall

#### TOOTH GRINDING

#### **PROFILE GEAR GRINDING**

• Up to 60" diameter ID/OD and 10' long if under 7.5" OD

#### INTERNAL TOOTH GRINDING

• 50" max ID x 15" spur tooth face length

#### **GENERATING GRINDING**

- Up to 47" diameter and 39" face length
- 47" between centers (including beveloid gears)





## VALUE-ADDED SERVICES

#### **CMM INSPECTION**

- Up to 40" OD and up to 60" long
- 3,000 pound max load

#### GEARBOX REPAIR AND RECONDITIONING

• Up to 38" OD gears

## **Full-Service Provider**

Horsburgh & Scott engineers and manufactures a wide range of small to large gears and gearboxes, and offers support services to keep your operations up and running.

### **REBUILD & REPAIR**

Horsburgh & Scott specializes in gearbox rebuild, repair and redesign. With over 150 years of experience, we have seen almost every type of gear.

**Our Repair Services include:** 

- Disassembly Reporting Comprehensive
- Failure Analysis
- Non-Destructive Testing
- Reverse Engineering Capabilities for Reliability
- Emergency Breakdown Repairs
- Enclosed Drive Spin Testin
- Non-destructive testing

## REVERSE ENGINEERING CAPABILITIES

- CMM
- In house engineering with 150 years of experience in power transmission designRush / Breakdown Services
- FEA and dynamic modeling capabilities to provide enhanced reliability in repairs



## 24/7 FIELD SERVICE

With a team of highly experienced technicians and engineers, we provide a comprehensive field service solution, including planned maintenance and 24/7 on-site emergency repairs.

- Installation Services
- Preventative Maintenance Services
- Rush / Breakdown Services
- Borescope Inspections
- Portable FARO Arm CMM to reverse engineer components and gear casings in the field.
- Supervisory guidance to rebuild
- Project manager for outage services to provide complete overhaul in the field to ensure gear drive reliability

