



# "There is No Equal"

The Market Leader: Yesterday Today and Tomorrow



## McKissick Sheaves

### HISTORY & EXPERIENCE

The ability to match the sheave design and manufacturing process to meet the application requirements requires experience. It also requires the ability to creatively use this experience and manufacturing resources to provide the best solution.

### THE COMPETITION

- Ask:** *What is their history and experience?*
- Ask:** *What processes do they have available to draw upon?*
- Ask:** *What technical experience do they have available to provide technical solutions to technical demands?*



McKissick has provided sheaves to energy and lifting industries since the early 1900's. Since McKissick became part of Crosby in the mid 1900's there has been a continuous history of product and process development. Crosby invented the roll forged sheave in 1978 and continues to be a leader today in sheave design and manufacturing process.

### DELIVERY & ACCESSIBILITY

Many energy and lifting sheave applications require short delivery times and delivery to locations around the world. Response times require flexible manufacturing resources. Access around the world requires not only logistics experience and capabilities, but also requires manufacturing resources strategically located around the world.

### THE COMPETITION

- Ask:** *How do they support short deliveries?*
- Ask:** *What is their experience providing worldwide delivery?*
- Ask:** *What resources do they have in key areas of the world?*



Crosby-McKissick stocks key raw materials and has an extensive bank of tooling and sufficient manufacturing capacity to support short deliveries. Crosby has McKissick block and sheave centers that serve their local markets in Tulsa, Oklahoma (USA); Putte, Belgium; Singapore; and Hangzhou, China.

### FLEXIBILITY OF DESIGN

Matching the best solution to the application requires the ability to fabricate sheaves by a number of processes:

- 1) Heavy Duty – Roll forged sheaves are hot forged with no splitting stresses at base for sheaves up to 78".
- 2) Heavy Duty – Closed die forged sheaves with machined Wireline groove for sheaves up to 16".
- 3) Extreme Duty – Roll forged sheaves with welded dome reinforcement employ the latest welding technology with no shape cross brace stress concentration areas.
- 4) Heavy Duty fabricated sheaves – With welded rings and reinforced webs utilizing the latest welding technology.
- 5) The ability to provide sheave grooves with 30, 35 and 45 degree profiles as well as other special profile
- 6) The ability to provide bearings to match application: Plain bore, bronze bushed, roller bearings, tapered roller bearings and full complement bearings.
- 7) Heat treatment of Wireline groove to provide wear resistance.

### THE COMPETITION

- Ask:** *How do they achieve the performance required with a split or cast sheave?*
- Ask:** *How do they resolve the welding stresses induced when you fabricate the sheave?*
- Ask:** *What sheave groove profile do they provide on a regular basis?*
- Ask:** *Do they have technical expertise to recommend proper sheave bearings?*
- Ask:** *How do they provide for proper Wireline groove life?*



McKissick offers roll forged sheaves that provide an upset metal flow without creating a stress zone at the splitting point. The dome-reinforced sheave design provides for a continuous weld in a circular pattern. McKissick produces sheaves in 30, 35, and 45 degree profiles, and can provide special profiles as required. Extensive experience underwater and in harsh and demanding environments gives McKissick the needed experience in selecting sheaves for all applications. From material selection to hardening of the groove, McKissick sheaves provide the needed wire-line life.

### SPECIFICATIONS

Many energy and lifting sheaves must meet standards. These standards include API, ABS, DIN, DNV and ASME. Demanding specifications for sheaves used in demanding applications also include strength, fatigue, impact and non-destructive testing.

### THE COMPETITION

- Ask:** *Do they understand and have experience in meeting the industry standards such as API, ABS, DIN, DNV and ASME?*
- Ask:** *Do they have a history of gaining required approvals?*
- Ask:** *Are they licensed to manufacture sheaves to API 8C?*



Crosby McKissick has achieved API Q1, and TS29001 Status, and is licensed to manufacture sheaves to API 8C. Sheaves are frequently provided to API, DNV and ABS requirements.

### TECHNICAL SUPPORT & TRAINING

The selection, use, inspection and maintenance of sheaves requires technical support. This technical support includes engineering services, training support and the ability to meet the various industry requirements around the world.

### THE COMPETITION

- Ask:** *What technical support do they provide?*
- Ask:** *Where is this support provided from?*
- Ask:** *What training is available to support the selection, use, inspection and maintenance of sheaves?*



Crosby has technical and operational support available from each of our McKissick Block and Sheave Centers around the world. Crosby provides extensive training through our one day Block and Sheave Clinics and our two-day Heavy Lift Seminars. Industry-specific training is also provided.

**Remember: "When buying Crosby, you're buying more than product, you're buying Quality."**