DURA-BAR DOUBLES DOWN ON OIL & GAS
Charter Dura-Bar has acquired the iron distribution business of Lokey Metals. Located in Fort Worth, Texas, USA, Lokey Metals becomes the fourth branch of Dura-Bar Metal Services, the service and distribution division of Charter Dura-Bar. Additional locations are in Woodstock, Illinois, USA; Salisbury, North Carolina, USA; and York, Pennsylvania, USA. The latest acquisition provides Charter Dura-Bar with an expanded geographic footprint as the company sets out to expand its reach into the oil and gas industry – most notably Dura-Bar for rotors and other components for pumps, compressors, and frac pump expendables.

Headquartered in Woodstock, Charter Dura-Bar manufactures Dura-Bar continuous cast iron bar stock, an alternative to steel, aluminum, and castings.

“This move further benefits the entire Charter Dura-Bar ecosystem as it provides a Texas-based platform to help increase awareness of the benefits of Dura-Bar across a wider variety and scope of oil and gas applications,” said David Green, account manager at Lokey Metals.

“Lokey Metals, established in 1958, has earned a great reputation for deep knowledge and excellent customer service in the oil and gas industry,” said Green. “Our dedicated and experienced team provides a great foundation for our increased ability to serve the oil and gas market.”

Lokey Metals’ facility is equipped with tooling capable of cutting up to 20 in. (508 mm) outer diameter and drilling up to 11.25 in. (285.75 mm) inner diameter stock. “Dura-Bar can be provided cut-to-length up to 26 in. (660 mm) outside diameter, with inner diameters provided to customer specifications,” said Nate Mendoza, warehouse operations supervisor at Lokey Metals.

“The mill keeps an on-hand inventory level of over 30 million pounds ready for same or next-day shipment,” said Green. “Since availability and short lead times are the name of the game, we are well suited to support the oil and gas industry.” With access to inventory at the other Dura-Bar Metal Services locations, Green added, “we can
provide much faster turnaround, shipping product either directly from Lokey Metals in Fort Worth or any of the other Dura-Bar Metal Services locations.”

Dura-Bar Metal Services can provide customized products for a variety of customer-required specifications. “We have the capability to supply quantities of round bar stock ranging in size from 0.625 to 29.50 inches (15.87 to 749.3 mm),” said Rick Barton, inside sales supervisor at Lokey Metals. “We can supply as-cast full bar lengths or customized sizes and forms to meet specific needs. Our ability to cut, bore, turn, and mill material to custom specifications maximizes the value for our customers,” added Barton.

Dura-Bar stock is available in a wide variety of sizes and shapes in all standard ASTM A48 and ASTM A536 gray and ductile iron grades.

According to Green, Dura-Bar ductile iron is often used as an alternative to plain carbon steel and has similar strengths with “excellent free machining” properties. “Dura-Bar 65-45-12 is a good replacement for low-carbon steel grades such as 1018, 1117, 1212, and 12L14. Dura-Bar 80-55-06 can be an alternative to medium carbon steels such as 1141, 1144, and 1045,” said Green.

Dura-Bar gray iron is available in two grades. Dura-Bar G2 contains Type A graphite in a pearlitic matrix. “G2 has excellent wear resistance and vibration damping,” said Green. “We also offer a higher strength gray iron — our G2S — which is ideal for applications where strength and hardenability are required.

“By using Dura-Bar, our customers can lower their overall parts’ cost by machining more parts per hour and decreasing cycle times,” added Green. “Dura-Bar allows customers to optimize their machining speeds and feeds, lower tooling costs, decrease downtime for tooling changes, and reduce the amount of scrap, thereby reducing the total cost of ownership.”

THE CONTINUOUS CASTING PROCESS

Dura-Bar’s continuous casting process begins with a water-cooled graphite die that is machined to form the shape of the bar. The die is mounted on a bar machine crucible. As the bar is pulled horizontally from the crucible, the head pressure feeds molten iron into the die, producing a fine-grained cast iron bar.

Since the bar is being pulled from the bottom of the holding crucible, dross, slag, and other impurities float to the top, away from the opening of the die. The Dura-Bar process enables the microstructure to be free from shrinkage, gas holes, and other tool-wearing inclusions.