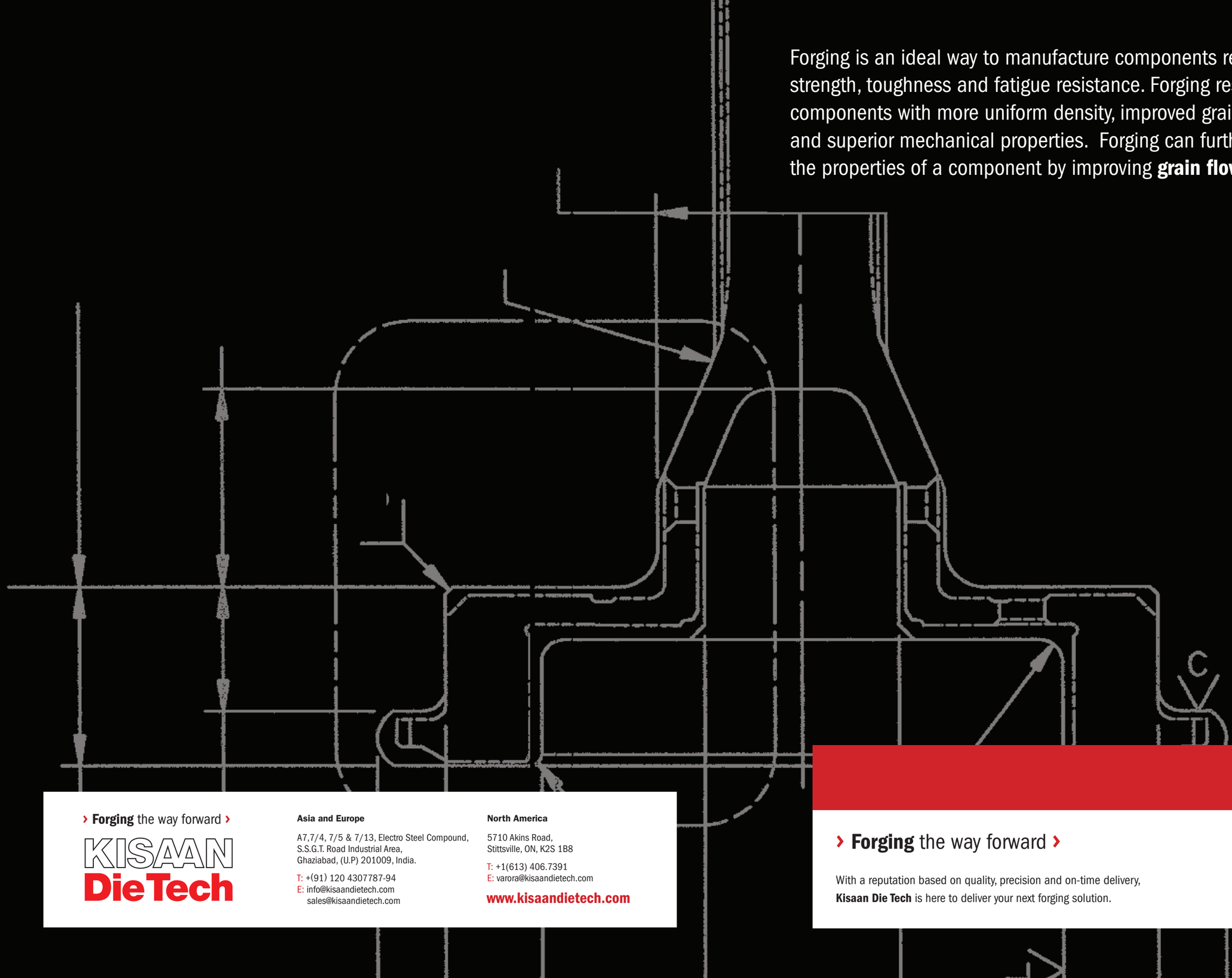


Forging is an ideal way to manufacture components requiring strength, toughness and fatigue resistance. Forging results in components with more uniform density, improved grain structure, and superior mechanical properties. Forging can further enhance the properties of a component by improving **grain flow.**

› **Forging** the way forward ›

KISAAN DieTech

Asia and Europe

A7,7/4, 7/5 & 7/13, Electro Steel Compound,
S.S.G.T. Road Industrial Area,
Ghaziabad, (U.P) 201009, India.

T: +(91) 120 4307787-94
E: info@kisaandietech.com
sales@kisaandietech.com

North America

5710 Akins Road,
Stittsville, ON, K2S 1B8

T: +1(613) 406.7391
E: varora@kisaandietech.com

www.kisaandietech.com

Forging

› **Forging** the way forward ›

With a reputation based on quality, precision and on-time delivery, **Kisaan Die Tech** is here to deliver your next forging solution.

KISAAN DieTech

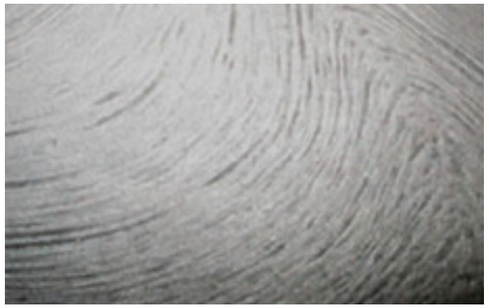
Our team of die designers will create a forging plan that ensures optimal grain flow direction, then work with our on-site die manufacturing facility to manufacture precise dies. In addition to a wide range of closed-die forged components, Kisaan Die Tech can also manufacture open-die forged components for any application.

› Kisaan Die Tech will also provide precision machining services for any of its products. Our capabilities extend from multi-axis milling and turning to NDT and CMM inspection. As an integrated manufacturer, Kisaan Die Tech is able to exercise complete control over the quality of materials and closely monitor manufacturing processes, final assembly and packaging.

Advantages of forging

- Improved mechanical properties
- Reduced machining costs and time
- Higher load bearing capacity with lighter weight
- Low to high volume production runs
- Comparable in cost to cast and wholly machined components

Grain Flow



Grain flow is the directional orientation of metal grains resulting from plastic deformation during the forging process. Individual grains are elongated in the direction of deformation. While the strength and hardness of an alloy are a function of composition and heat treatment, fatigue strength, impact toughness and ductility can be significantly improved by identifying the critical loading locations of the component and ensuring that the grain flow is properly aligned.

ENLISTMENT CERTIFICATION CERTIFICATION CERTIFICATION CERTIFICATION

Quality Assurance

Kisaan Die Tech's commitment to quality begins with sourcing high-quality, inclusion-free materials from reputable suppliers. With a network of suppliers around the world, we are able to choose the ideal material for your application and ensure traceability through the complete manufacturing cycle. Throughout the manufacturing cycle samples are taken to ensure process conformance and confirm traceability.

After forging, a sample is sectioned, ground and polished for inspection. An etchant is then applied to the surface to reveal features of the forging on a scale that can be observed with a human eye. Our lab technicians are trained to carry out testing as per ASTM E-381, Standard Method of Microetch testing for Steel Forgings. Further destructive tests are carried out to ensure conformance to specifications using our calibrated (NIST verified) impact and tensile testing equipment. Kisaan Die Tech is also able to arrange independent, third-party analysis.

Final products are carefully inspected for dimensional tolerances and finish before being packaged to your specifications. Test certificates are included with each shipment or as required.

Certifications

- Quality Management Programme: ISO 9001:2015
- European Union's Pressure Equipment Directives: PED 2014/68/EU and AD 2000-Merkblatt W0
- Occupational Health and Safety: ISO 45001:2018
- Environmental Management System: ISO 14001: 2015
- Norsok M-650 Ed.6
- Canadian Registration Number (CRN), B16 line of Flanges
- IBR Well Known Forge
- LR MARINE Approved Manufacturer

› Materials

Please contact us for more information.

ASTM **A182 F5**
ASTM **A182 F9**
ASTM **A182 F11**
ASTM **A182 F22**
ASTM **A182 F91**
ASTM **A182 F51** Duplex Stainless Steel
ASTM **A182 F304/H/L**
ASTM **A182 F53**
ASTM **A182 F55**

ASTM **A182 F60**
HASTELLOY **C22**
HASTELLOY **C276**
ASME **SA266**
BS970 - **3**
EN **10025**
EN **10083**
EN **10088**
EN **10269**

EN **10222**
ASTM **A182 F316/H/L**
ASTM **A182 F321/H**
ASTM **A182 F310/H**
ASTM **A182 F317/L**
ASTM **A182 F347/H/L**
ASTM **A 105N**
ASTM **A 350 LF2**
ASTM **A29 4140**

ASTM **A29 4340**
ASTM **A29 8620** CSA (Canadian Standards Association) Grades
ASTM **A 694**: High Strength transmission- service pipe.
ANSI/**NACE MR0175/ISO 15156**
NACE **MR0103**