



Approved Manufacturer of Steel Forgings

Manufacturer	Hyundai Integrated Forging Co., Ltd.
Address	46, Yulchonsandan 5-ro, Haeryong-myeon, Suncheon-si, Jeollanam-do, 58034, South Korea
Type	Steel Forgings

This approval is subject to compliance with the Rules for the Manufacture, Testing and Certification of Materials. The full details of the processes and grades to which this approval applies are given on subsequent pages of this certificate.

This certificate is issued to the named manufacturer, and is valid until the expiry date specified. Lloyd's Register is to be notified of any change that may affect the validity of this certificate, and reserves the right to cancel or withdraw this certificate.



71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Milena Matijasevic-Clarke

Metallurgy Team - Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Approved Manufacturer of Steel Forgings

Steel Forgings	Forgings	Grades	Maximum Weight	Units
-	-	carbon, carbon manganese	80.00	Tonnes
-	-	Alloy	60.00	Tonnes

Additional Remarks

Approval includes:

Semi-Built C-Mn and Alloy Crank Throw by open die forging, maximum weight, 42.3 Tonnes.

Continuous grain flow alloy steel crankshaft by closed die forging, maximum weight, 44.39 Tonnes.

Continuous grain flow C-Mn steel crankshaft by closed die forging, maximum weight, 11.76 Tonnes.



71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.