FAGGIOLATI PUMPS® S.p.A.

Macerata - Italy

www.faggiolatipumps.com

ISO 9001:2000

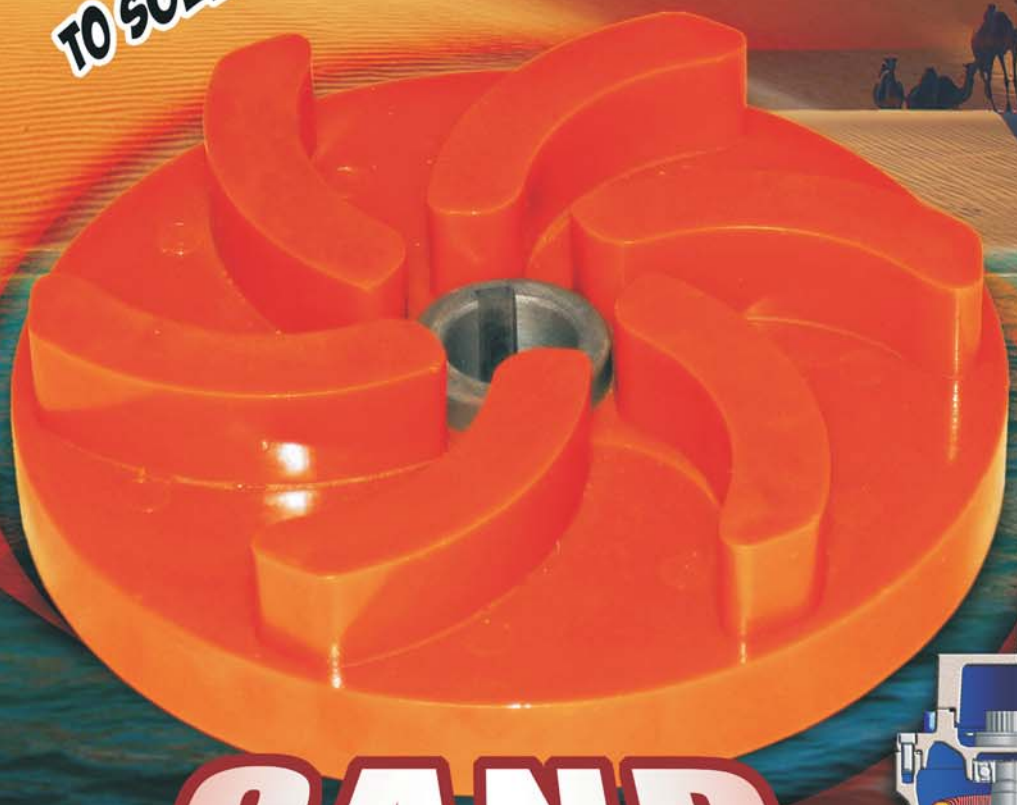
UNI EN ISO 14001:2004

ATEX

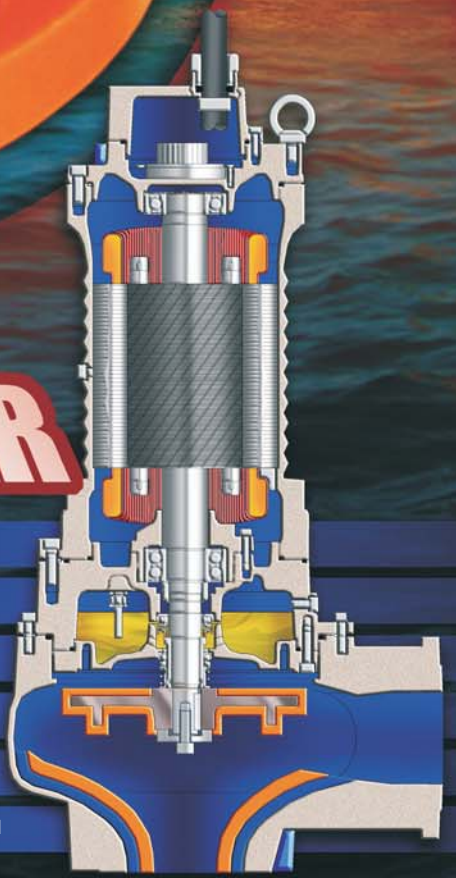
2009

NEWS

...DO YOU WANT TO SOLVE YOUR PROBLEMS?



SAND VORTEX - WATER



Per applicazioni in impianti con presenza di sabbie

Designed to suit applications in plants with an high sand presence

Conçues pour le pompage des eaux chargées de particules très abrasive

Speziell für die Verwendung in Anlagen mit hohem Sandgehalt

Diseñada para aplicaciones en plantas con una alta presencia de arena

Projectadas para se adequarem a instalações com elevada presença de areia

SAND VORTEX-WATER

Applicazioni

Le elettropompe SAND VORTEX WATER sono concepite per applicazioni in impianti con presenza di sabbie, nella lavorazione di marmi, nell'industria ceramica, lavorazione dei cristalli e processi industriali con liquidi abrasivi.
Il rivestimento in poliuretano, garantisce un'elevata affidabilità della macchina contenendo i costi di gestione.

Materiali

(1) Albero: acciaio inox AISI 420B - **(2)** Motore: classe H(180°C) IP68 - **(3)** Fusioni principali: Ghisa EN-GJL-250 - **(4)** Tenute meccaniche: superiore Ceramica/Grafite, inferiore Carburo di Silicio/Carburo di Silicio - **(5)** Girante poliuretano con anima in acciaio - **(6)** Diffusore Ghisa EN-GJL-250 rivestito con poliuretano nelle zone di maggiore usura.

Applications

The SAND VORTEX WATER submersible electric pump are designed to suit applications in plants with an high sand presence, in marble work companies, in the ceramic industry, crystals machining or industrial processes where there's presence of abrasives liquids. The Polyurethane coating guarantees an high pump reliability, saving management costs.

Materials

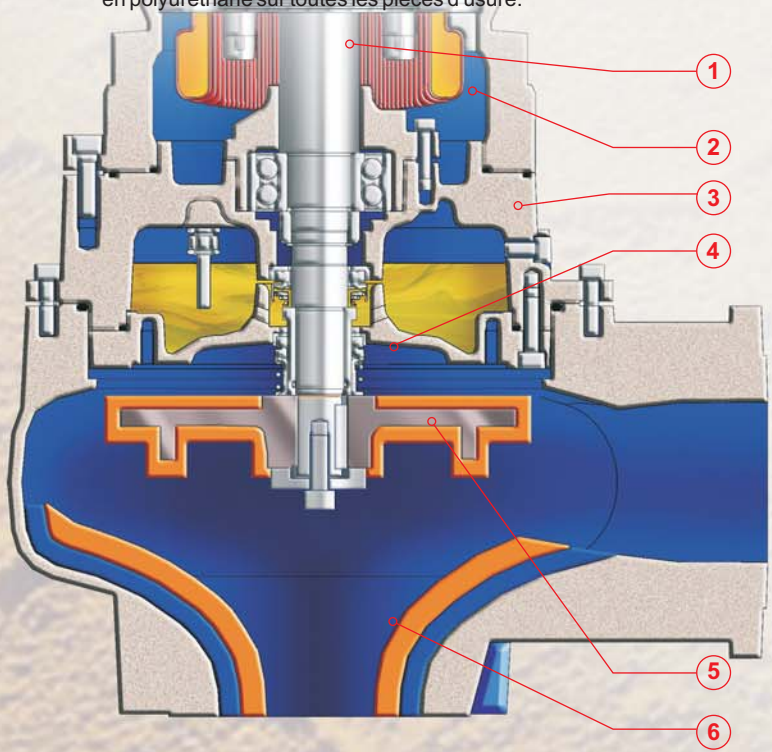
(1) Shafts realized in stainless steel AISI 420B - **(2)** Motor asynchronous threephase insulation class H(180°C) protection degree IP 68 - **(3)** Motor housing: Cast iron EN-GJL-250 - **(4)** Mechanical seal: Upper Ceramic/Graphite, Lower silicon carbide/silicon carbide - **(5)** Impeller in Polyurethane with a stainless steel core - **(6)** Diffuser in Cast-Iron EN-GJL-250, coated by Polyurethane in the parts subdue to high wear.

Applications

Les pompes submersibles SAND VORTEX WATER, sont spécialement conçues pour le pompage des eaux chargées de particules très abrasives, dans les applications de pompage des industries du marbre, de la céramique, les poussières de cristaux, mais également pour tout autres liquides abrasifs.
Le revêtement polyuréthane, garantie une haute fiabilité et résistance à l'abrasion , avec un coût de maintenance très réduit.

Matériaux

(1) Les arbres sont réalisés en acier inoxydable AISI 420B - **(2)** Moteur asynchrone triphasé classe d'isolation H(180°C) degré de protection IP68 - **(3)** Moulures: Fonte EN-GJL-250 - **(4)** Garniture mécanique: supérieure céramique/carbone, inférieure mécanique, carbure de silicium/carbure de silicium - **(5)** Roue avec enrobage en polyuréthane et âme en acier inox - **(6)** diffuseur en fonte en GJL250, avec enrobage en polyuréthane sur toutes les pièces d'usure.



Einsatzgebiete

Die SAND VORTEX WATER Elektropumpen wurden speziell für die Verwendung in Anlagen mit hohem Sandgehalt sowie für den Einsatz bei der Marmorverarbeitung, in der Keramikindustrie, bei der Verarbeitung von Kristallen und bei industriellen Verfahren mit flüssigen Scheuermitteln konzipiert. Die Polyurethan-Beschichtung sorgt für eine hohe Zuverlässigkeit der Maschine und senkt somit die Betriebskosten.

Werkstoffe

(1) Welle aus Edelstahl AISI 420B - **(2)** Motor Asynchronmotor dreiphasig Isolationsklasse H(180°C) - **(3)** Motorgehäuse: Grauguss EN-GJL-250 - **(4)** Obere Dichtung Gleitringdichtung Kohle / Keramik, Untere Dichtung Gleitringdichtung Siliziumkarbid - **(5)** Polyurethan-Laufrad mit Stahlkern - **(6)** Diffusor Grauguss EN-GJL-250, beschichtet mit Polyurethan in den Bereichen mit dem größten Verschleiß.

Utilizacion

La bomba Sumergible serie SAND VORTEX WATER ha sido diseñada para aplicaciones en plantas con una alta presencia de arena, empresas de mármol, industria de cerámicas, cristalería o procesos industriales donde existe presencia de líquidos abrasivos. El recubrimiento de poliuretano garantiza una alta confiabilidad y un ahorro en el manejo de costos.

Materiales

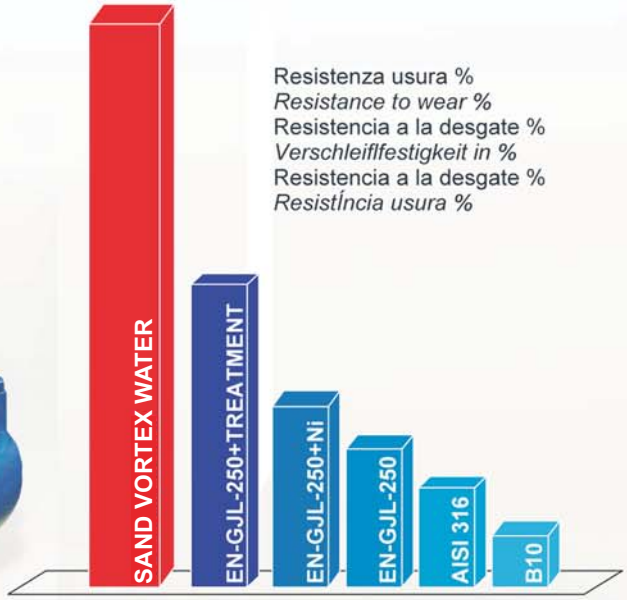
(1) Ejes realizados en acero inoxidable AISI420B - **(2)** Motor asincrónico trifásico aislamiento H(180°C) Grado de protección IP68 - **(3)** Aleaciones principales: Hierro fundido EN-GJL-250 - **(4)** Sellado/precintado superior mecánica, grafito/cerámica, inferior mecánica, carburo y silicio - **(5)** impulsor en poliuretano con centro de acero inoxidable - **(6)** Difusor en Fierro fundido EN-GJL-250, recubierto en poliuretano en las partes expuestas a alto desgaste

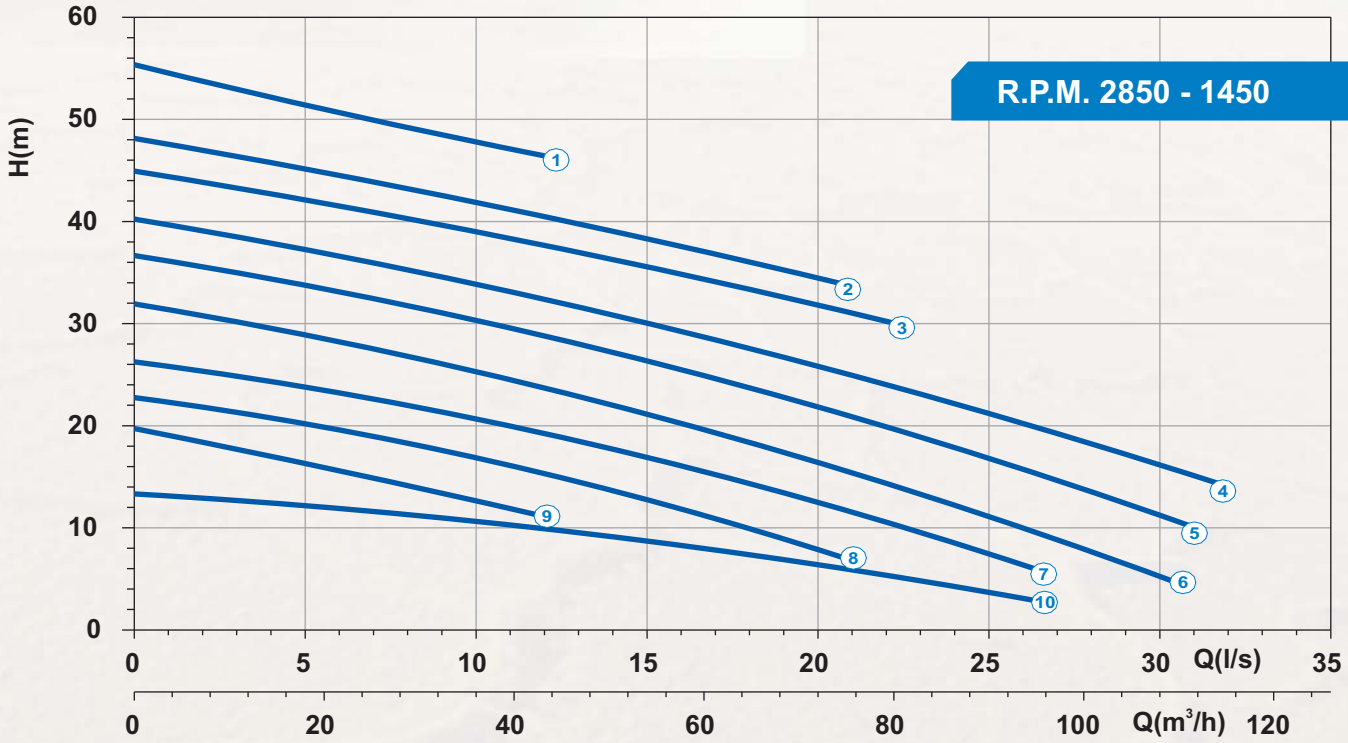
Usos

As Bombas submersíveis SAND VORTEX WATER foram projectadas para se adequarem a instalações com elevada presença de areia, em pedreiras de mármore, na indústria cerâmica, na maquinagem de cristais ou em processos industriais onde há presença de líquidos abrasivos.O revestimento em poliuretano garante uma elevada fiabilidade da bomba, baixando os custos de exploração.

Materiais

(1) Eixos realizados em aço inoxidável AISI 420B - **(2)** Motor assíncrono trifásico classe de isolamento H(180°C) Grado de protección IP68 - **(3)** Fusões principais Ferro fundido EN-GJL-250 - **(4)** Contenção superior: mecânica, grafite/cerâmica, inferior carboneto de silício - **(5)** Impulsor em Poliuretano com núcleo em aço inox - **(6)** difusor de Ferro Fundido-EN-GJL-250, revestido com poliuretano nas partes sujeitas a grande desgaste.





Curve N°	Code	Type	MOTOR Nominal P P2 (kW)	MOTOR Nominal I I (A)	MOTOR Starting I Is (A)	Power Supply	DN mm	Free Pass. mm	Weight Kg
1	7000728	**G213R6S1-M35AA2**	18,2	34	193	3ph 400/690V-50Hz	DN 80	35	191
2	7001262	**G213R6S2-M35AA2**	18,2	34	193	3ph 400/690V-50Hz	DN 80	35	191
3	7001283	**G213R6S3-M35AA2**	18,2	34	193	3ph 400/690V-50Hz	DN 80	35	191
4	7001226	**G213R6S4-M35AA2**	18,2	34	193	3ph 400/690V-50Hz	DN 80	35	191
5	7009200	**G213R3S1-M35AA2**	15,9	30	171	3ph 400/690V-50Hz	DN 80	35	191
6	7001559	**G213R3S2-M35AA2**	15,9	30	171	3ph 400/690V-50Hz	DN 80	35	191
7	7003523	**G213R3S3-M35AA2**	14,6	26,8	152	3ph 400/690V-50Hz	DN 80	35	191
8	7001190	**G211R3S1-M35AA2**	8,2	15,5	91	3ph 400/690V-50Hz	DN 80	35	150
9	7004331	**G211R3S2-M35AA2**	8,2	15,5	91	3ph 400/690V-50Hz	DN 80	35	150
10	7000382	**G411R6S1-M35AA2**	7	13,2	63	3ph 400/690V-50Hz	DN 80	35	160

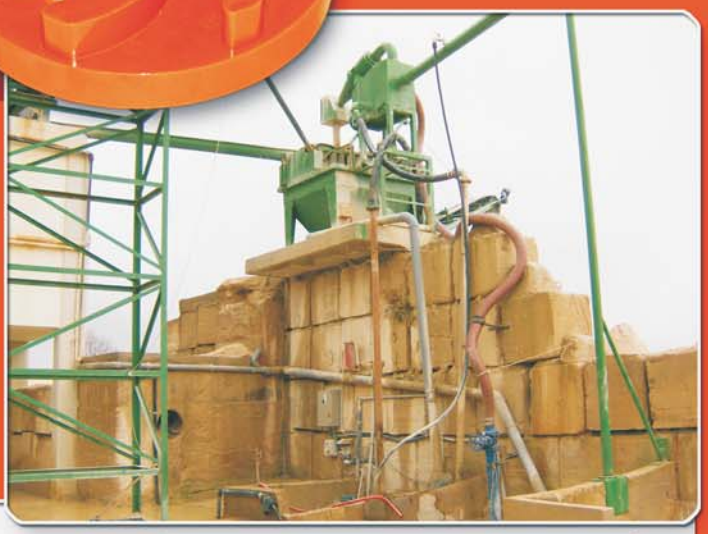
Le schede tecniche sono disponibili al sito www.faggiolatipumps.com. Per informazioni particolari rivolgersi ai ns. uffici commerciali.
Technical data sheets are available on our web site www.faggiolatipumps.com. For furthers informations, please get in touch with our commercial depts.
Les fiches techniques sont disponibles sur notre site web www.faggiolatipumps.com. Pour informations particulières s'adresser à notre office commercial.
Technische Datenblätter finden Sie auf unserer Internetseite www.faggiolatipumps.com. Für zusätzliche Informationen wenden Sie Sich bitte an unsere Vertriebsabteilung.
Las hojas de datos técnicas están disponibles en nuestro site www.faggiolatipumps.com. Para informaciones especificas rogamos se pongan en contacto con nuestros comerciales.
As fichas técnicas estão disponíveis no site www.faggiolatipumps.com. Para informações particulares dirigir-se aos nossos escritórios comerciais.

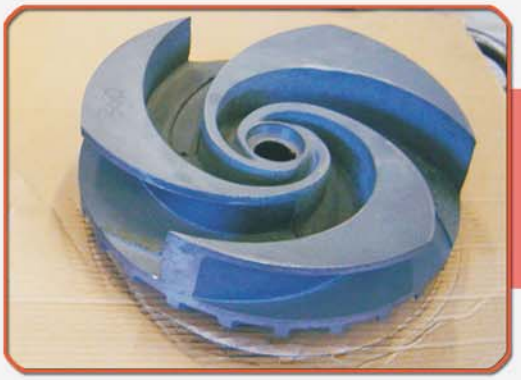
SAND VORTEX - WATER

CASE HISTORY

Pompa tipo 418 serie "Sand Vortex Water" in impianti per la produzione di calcestruzzi con forti agenti abrasivi.

Il cliente deve effettuare un sollevamento di acque usate per il lavaggio di breccia proveniente dall' estrazione di cave, separando le sabbie presenti.





Girante in ghisa EN-GJL-250 Dopo 3 mesi

SAND VORTEX WATER Dopo 12 mesi

Soluzione

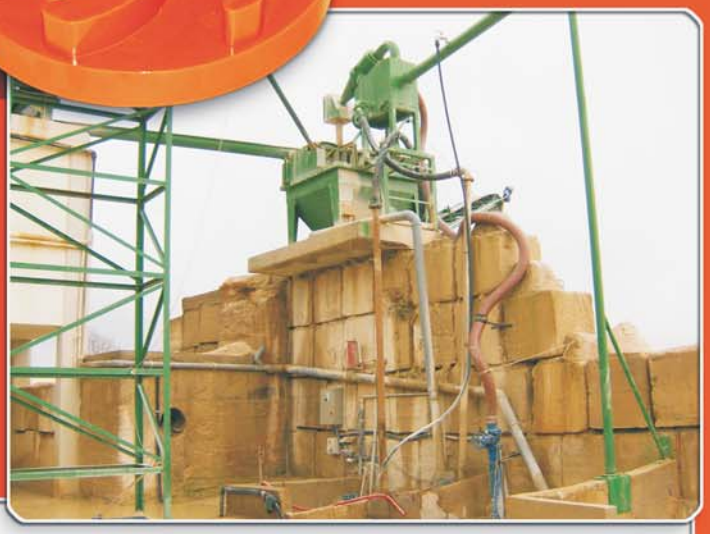
Vista la forte concentrazione di sabbie fortemente abrasive, la durata della girante e del diffusore in **Ghisa EN-GJL-250** con trattamento al tungsteno non garantiva periodi di funzionamento accettabili.
Si è deciso di usare la nuova serie **"Sand Vortex Water"** con girante in poliuretano e diffusore parzialmente rivestito in poliuretano.

Vantaggi

I tempi di manutenzione ordinaria sono passati da 3 a 12 mesi, evitando frequenti fermi impianti. La minore usura della parti rotanti a contatto con il liquido pompato hanno ridotto le sollecitazione sui cuscinetti e sull'intera macchina. Sono stati fortemente ridotti sia i costi di manutenzione che di sostituzione delle parti usurate.
Caratteristiche della pompa:
Prevalenza richiesta: 22m **Portata richiesta**:100 m3/h
Pompa: G418R3V1-S100XA2 400V-50Hz cod. 7007654 **Potenza Nominale**: 30KW

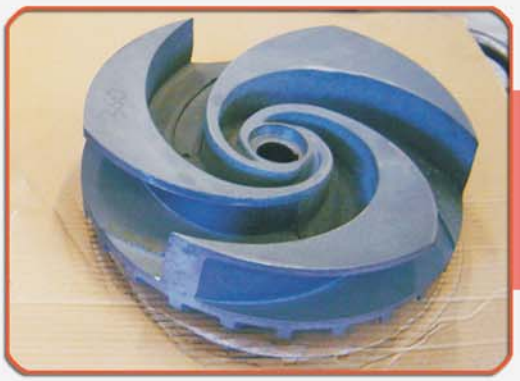
SAND VORTEX - WATER

CASE HISTORY



Pump type 418 series "Sand Vortex Water" operating with highly abrasive liquids on concrete production plants.

The client has to lift water drained after gravel washing in quarries, separating suspended sands.



Impeller in Cast Iron EN-GJL-250, After 3 months operation

Sand Vortex Water after 12 months operation

Previous solution

With the high content of highly abrasive material, the life of impeller and diffuser in **Cast Iron EN-GJL-250** even when treated with Tungsten Carbide still didn't provide acceptable operating life.

Sand Vortex Water Solution

Maintenance periods increased from 3 to 12 months, avoiding frequent plant stops. The reduced wear of the rotating parts in contact with the pumped media, reduced vibrations and, consequently, reduced the stress of bearings and of the whole pump. Maintenance costs (labour and spare parts) have been reduced considerably.

Pump Performance:

Required Head: 22m **Required Capacity**: 100 m3/h

Pump Type: G418R3V1-S100XA2 400V-50Hz cod. 7007654 **Rated Power**: 30KW

Designer and manufacturer of submersible electric pumps, mixers and aerators in cast iron, stainless steel AISI 316 / super duplex alloys / bronze B10

From kW 0.50 to kW 350

PATENTED COD.2007A000152

FAGGIOLATI PUMPS® S.p.A.

62100 Z. Ind. **Macerata** (Italy)
Tel. (+39) 0733.205.601 Fax 0733.203258
Web site: **http://www.faggiolatipumps.com**
E-mail: faggiolatipumps@faggiolatipumps.it

Cap. Soc. Euro 2.040.000,00 int. vers.
Cod. Fisc. P.IVA 01207900430 R.E.A. MC 123548

Sales department - Fujairah (United Arab Emirates)
Faggiolati Gulf (UAE) faggiolatigulf@faggiolatipumps.com