

A stylized, colorful illustration of an industrial facility. On the left, a large vertical storage tank with a domed top and a cross-section showing internal layers. In the center, two tall distillation columns with ladders and platforms. To the right, a smaller column and various pipes. In the foreground, a forklift with a red crane arm is lifting a white container. The background features blue mountains and a clear sky.

CATALYSTS & ADSORBENTS

PRODUCT LISTING

Axens
SOLUTIONS

Powering Integrated Solutions

Axens Group provides a complete range of solutions for the conversion of oil and biomass to cleaner fuels, the production and purification of major petrochemical intermediates as well as treatment and conversion options for natural gas. The integrated offer includes technologies, equipment, furnaces, modular units, catalysts, adsorbents and related services.

From feasibility studies to unit start-up and follow-up throughout the entire unit cycle life, Axens Group is ideally positioned to cover the entire value chain while ensuring the highest level of performance with reduced environmental footprint.



Over
3,000
industrial units
under license



Over
70,000
tons of catalysts and adsorbents
each year coupled with
catalysts services



Over
500
modular units
references



More than
3,500
furnaces sold
(with more than 2,000
references)



Offices in
15
countries

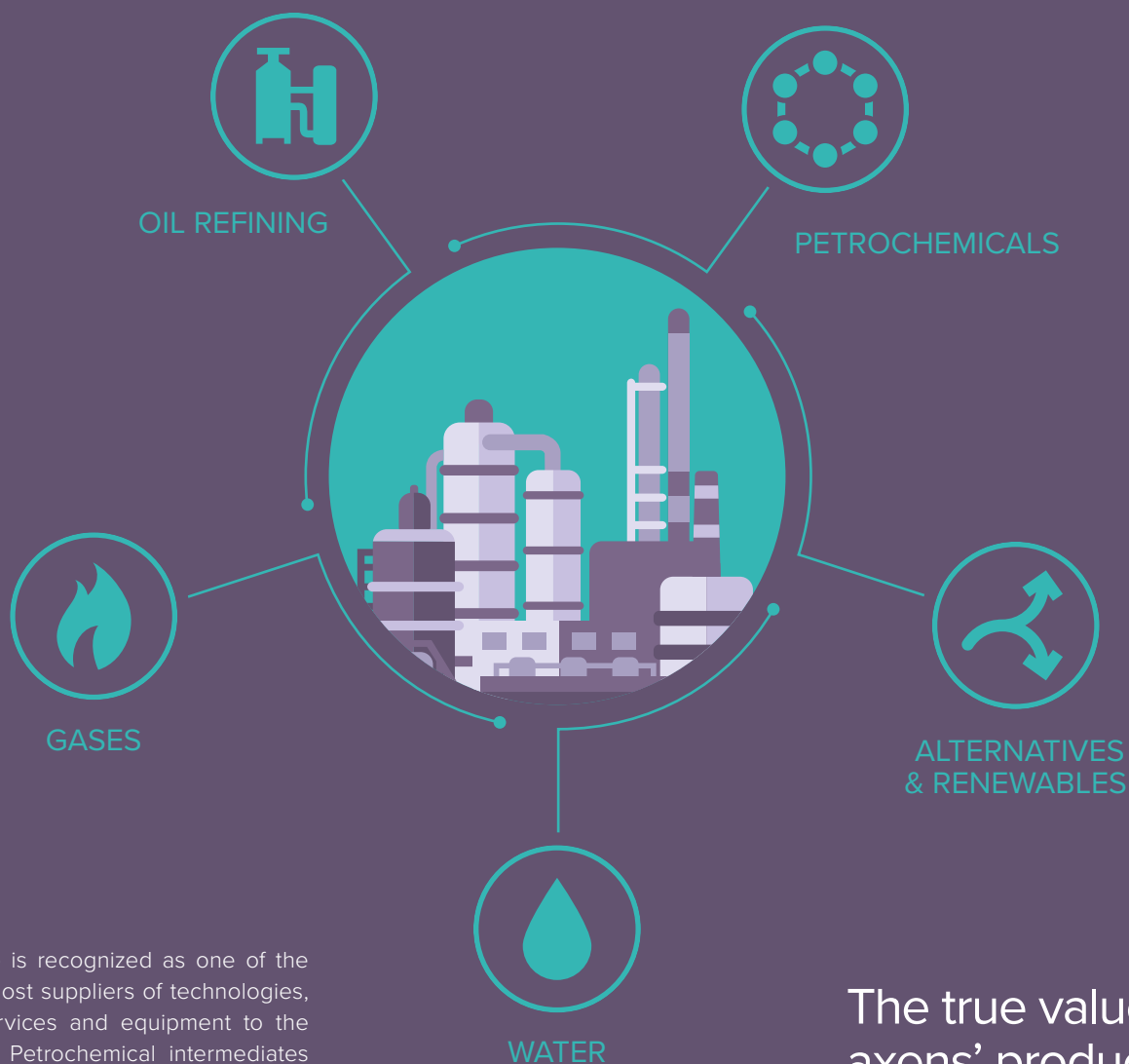
> Axens

S.A. Share Capital 156,285,689.85 €
R.C. Nanterre B 599 815 073

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Operating in five markets



Axens Group is recognized as one of the world's foremost suppliers of technologies, products, services and equipment to the Refining and Petrochemical intermediates markets. To satisfy industry needs and help its clients to be more successful, Axens is committed to developing and manufacturing the most advanced, reliable and cost-effective catalysts and adsorbents. A careful attention is being devoted to each step of the manufacturing process of these highly technical products, the result of continuous investment in development and improvement programs.

Axens management systems are certified for:

- quality (ISO 9001)
- environment (ISO 14001)
- safety (OHSAS 18001)
- energy management (ISO 50001)

Axens' products constitute the most complete portfolio on the market and cover all refining, petrochemicals and gas processing areas, including sulfur recovery, dessicants and stream purification, as well as grading materials.

The true value of axens' products goes beyond the performance of the material itself

Helping the Oil & Gas industry players to be more efficient by supporting its operations with assistance throughout the catalyst cycle life is part of Axens' commitment. Based on strong, experienced and local technical services teams, Axens' offer includes a complete service program of start-up, loading & unloading assistance, performance follow-up, analysis of spent material, regeneration recommendations and performance predictions.

Axens' products by application



OIL
REFINING



PETROCHEMICALS



GASES



ALTERNATIVES
& RENEWABLES



WATER

CATALYSTS

REFORMING & ISOMERIZATION

CCR REFORMING	✓	✓		
SR OR CYCLIC REFORMING	✓	✓		
CYCLIC REFORMING	✓	✓		
ISOMERIZATION	✓			

AROMATICS PRODUCTION

HYDROPROCESSING

HYDROCRACKING	✓			
VGO HYDROTREATING	✓			
MIDDLE DISTILLATES & NAPHTHA HYDROTREATING	✓			
PRIME-G+® CRACKED GASOLINE HYDROTREATING	✓			
RESIDUE HYDROTREATING	✓			

SULFUR RECOVERY

CLAUS CATALYSTS	✓		✓	✓
ACTIVE BED SUPPORTS	✓		✓	✓
TAIL GAS TREATMENT CATALYSTS	✓		✓	✓

HYDROGENATION

SELECTIVE HYDROGENATION	✓	✓		
TOTAL HYDROGENATION	✓	✓		
CRACKED GASOLINE HYDROGENATION	✓	✓		

SPECIALIZED APPLICATIONS

HETEROGENEOUS OLIGOMERIZATION	✓	✓		
HOMOGENEOUS OLIGOMERIZATION	✓	✓		
CYCLOHEXANE PRODUCTION		✓		
LINEAR ALKYL BENZENES (LAB)		✓		
SWEETENING	✓		✓	
BIODIESEL PRODUCTION				✓
ENVIRONMENT	✓	✓	✓	

GRADING

INERT GRADING	✓	✓		
ACTIVE GRADING	✓	✓		
SITRAP® SERIES	✓	✓		
ARSENICTRAP™ SERIES	✓	✓		

ADSORBENTS

SELECTIVE CONTAMINANTS REMOVAL (GUARD BEDS)

AXTRAP™ - ARSINE SERIES	✓	✓	✓	✓
AXTRAP™ - MERCURY SERIES	✓	✓	✓	✓
AXTRAP™ - FLUORIDE SERIES	✓			
AXTRAP™ - CHLORIDE SERIES	✓	✓	✓	✓
AXTRAP™ - SULFUR SERIES	✓	✓	✓	✓
AXTRAP™ - SULFUR SCAVENGER	✓	✓	✓	✓

DRYING & PURIFICATION

AXSORB® - DRYING SERIES	✓	✓	✓	✓
AXSORB® - PURIFICATION SERIES	✓	✓	✓	✓
AXSORB® - SPECIALITY SERIES	✓	✓		
ACTIGUARD™ - WATER TREATMENT SERIES				✓

CATALYSTS REFORMING AND ISOMERIZATION

	 OIL REFINING	 PETROCHEMICALS	 GASES	 ALTERNATIVES & RENEWABLES	 WATER
CCR REFORMING	✓	✓			
SR OR CYCLIC REFORMING	✓	✓			
CYCLIC REFORMING	✓	✓			
ISOMERIZATION	✓				
AROMATICS PRODUCTION		✓			

	Applications	Material	Shape
CCR REFORMING			
Symphony® PS 100	Gasoline production	Multipromoted Pt, Sn on low density Al ₂ O ₃	S
Symphony® PS 110	Gasoline production	Multipromoted Pt, Sn on low density Al ₂ O ₃	S
Symphony® CR 157	Gasoline production	Multipromoted Pt, Sn on high density Al ₂ O ₃	S
Symphony® AR 151	Aromatics production	Multipromoted Pt, Sn on high density Al ₂ O ₃	S
SR OR CYCLIC REFORMING			
Symphony® PR 150	Gasoline production	Balanced multipromoted Pt, Re on high density Al ₂ O ₃	C
Symphony® PR 156	Gasoline production	Unbalanced multipromoted Pt, Re on high density Al ₂ O ₃	C
RG 682	Gasoline production	Unbalanced promoted Pt, Re on low density Al ₂ O ₃	C
CYCLIC REFORMING			
Symphony® P 152	Gasoline production	Multipromoted Pt, high density Al ₂ O ₃	C
ISOMERIZATION			
ATIS-1L	C ₄ Paraffins isomerization	Pt on chlorinated Al ₂ O ₃	C
ATIS-2L	C ₅ -C ₆ Paraffins isomerization	Pt on chlorinated Al ₂ O ₃	C
IS 463	C ₅ Olefins skeletal isomerization (Iso-5®)	Proprietary	S
AROMATICS PRODUCTION			
OPARISPLUS®	Ethylbenzene & Xylenes isomerization	Pt & Zeolite on Al ₂ O ₃	C
OPARISMAX®	Ethylbenzene & Xylenes isomerization	Pt & Zeolite on Al ₂ O ₃	C

Shape: **C** Cylindrical Extrudate • **FR** Fluted Ring • **G** Granule • **HC** Hollow Cylinder • **L** Liquid • **ML** Multilobe Extrudate • **PT** Penta Ring • **S** Sphere

CATALYSTS HYDROPROCESSING



OIL REFINING



PETROCHEMICALS



GASES



ALTERNATIVES
& RENEWABLES



WATER

HYDROCRACKING



VGO HYDROTREATING



MIDDLE DISTILLATES



& NAPHTHA HYDROTREATING

PRIME-G+® CRACKED GASOLINE



HYDROTREATING

RESIDUE HYDROTREATING



	Applications	Material	Shape
HYDROCRACKING			
Impulse® HR 1058	Hydrocracking pretreatment, HDN & HDA, maximum performances	NiMo, Al ₂ O ₃	ML
Impulse® HRK 1448	Hydrocracking pretreatment, HDN & HDA, maximum performances	NiMo, Al ₂ O ₃	ML
HRK 658	Hydrocracking pretreatment & high HDN activity	NiMo, Al ₂ O ₃	ML
Craken™ Flex HDK 766	Hydrocracking for Fuels & Lube Oils production	Metals on ASA	ML
Craken™ Flex HDK 786	Hydrocracking for Fuels & Lube Oils production	Metals on ASA	ML
Craken™ Flex HYK 732	Hydrocracking for Fuels & Lube Oils production	Metals on supported Zeolite	ML
Craken™ Flex HYK 742	Hydrocracking for Fuels & Lube Oils production	Metals on supported Zeolite	ML
Craken™ Flex HYK 752	Hydrocracking for Fuels & Lube Oils production	Metals on supported Zeolite	ML
Craken™ Flex HYK 762	Hydrocracking for Fuels & Lube Oils production	Metals on supported Zeolite	ML
Craken™ D HYK 733	Hydrocracking for Middle Distillates production	Metals on supported Zeolite	ML
Craken™ D HYK 743	Hydrocracking for Middle Distillates production	Metals on supported Zeolite	ML
Craken™ D HYK 753	Hydrocracking for Middle Distillates production	Metals on supported Zeolite	ML
VGO HYDROTREATING			
Impulse® HR 1056	HDS, HDN & HDA, maximum performances	CoMo, Al ₂ O ₃	ML
Impulse® HR 1058	HDS, HDN & HDA, maximum performances	NiMo, Al ₂ O ₃	ML
HR 508	High HDS & HDN activity	NiMo, Al ₂ O ₃	ML
HR 504	High HDS & HDN activity	CoMoNi, Al ₂ O ₃	ML
HR 544	High HDS & HDN activity	CoMoNi, Al ₂ O ₃	ML
MIDDLE DISTILLATES AND NAPHTHA HYDROTREATING			
Impulse® HR 1246	HDS, maximum performances	CoMo, Al ₂ O ₃	ML
Impulse® HR 1218	HDS & HDA, maximum performances	NiMo, Al ₂ O ₃	ML
Impulse® HR 1248	HDS & HDA, maximum performances	NiMo, Al ₂ O ₃	ML
HR 626	High HDS activity	CoMo, Al ₂ O ₃	ML
HR 618	High HDS activity	NiMo, Al ₂ O ₃	ML
HR 608	High HDS & HDA activity	NiMo, Al ₂ O ₃	ML
HR 648	High HDS & HDA activity	NiMo, Al ₂ O ₃	ML
HR 945	Hydrogenation of Olefins & Diolefins for Delta P management	NiMo, on neutral Al ₂ O ₃	S
HR 955	Hydrogenation of Olefins & Diolefins for Delta P management	NiMo, on neutral Al ₂ O ₃	ML
PRIME-G+® CRACKED GASOLINE HYDROTREATING			
HR 845	Selective hydrogenation	Proprietary	S
HR 806	Selective HDS	Proprietary	S
HR 846	Selective HDS	Proprietary	S
HR 856	Selective HDS	Proprietary	ML
HR 841	Selective HDS	Proprietary	S
RESIDUE HYDROTREATING			
HF 418	HDM of Atmospheric & Vacuum Residue	NiMo, Al ₂ O ₃	ML
HF 858	HDM of Atmospheric & Vacuum Residue	CoMoNi, Al ₂ O ₃	ML
HMC 868	HDM of Atmospheric & Vacuum Residue	CoMoNi, Al ₂ O ₃	S
HM 428	HDM/HDS of Atmospheric & Vacuum Residue	NiMo, Al ₂ O ₃	ML
HM 848	HDM/HDS of Atmospheric & Vacuum Residue	CoMoNi, Al ₂ O ₃	ML
HT 438	HDS of Atmospheric & Vacuum Residue	CoMoNi, Al ₂ O ₃	ML

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CATALYSTS SULFUR RECOVERY



OIL REFINING



PETROCHEMICALS



GASES



ALTERNATIVES
& RENEWABLES



WATER

CLAUS CATALYSTS



ACTIVE BED SUPPORT



TAIL GAS TREATMENT CATALYSTS



	Applications	Material	Shape
CLAUS CATALYSTS			
CR 3-7	Claus reaction	Al ₂ O ₃	S
CR-400	Claus reaction	Al ₂ O ₃	S
CR-3S	Claus reaction & COS hydrolysis	Al ₂ O ₃	S
CR-3S LG	Claus reaction for low turn-down	Al ₂ O ₃	S
AM	Oxygen scavenger in Sulfur recovery units	Fe, Al ₂ O ₃	S
AMS	Oxygen scavenger in Sulfur recovery units	Fe, Al ₂ O ₃	S
CRS 31	Claus reaction & COS/CS ₂ hydrolysis	TiO ₂	C
CSM 31	Claus reaction & Carsul management	Proprietary, Al ₂ O ₃	S
ACTIVE BED SUPPORT			
DR	Active bed supports for Claus reactors	Al ₂ O ₃	S
TAIL GAS TREATMENT CATALYSTS			
TG 103	Tail Gas treatment	CoMo, Al ₂ O ₃	S
TG 203	Tail Gas treatment	CoMo, Al ₂ O ₃	S
TG 107	Low temperature Tail Gas treatment	CoMo, Al ₂ O ₃	S
TG 136	Low temperature Tail Gas treatment	CoMo, Al ₂ O ₃	ML

CATALYSTS HYDROGENATION



OIL REFINING



PETROCHEMICALS



GASES



ALTERNATIVES
& RENEWABLES



WATER

SELECTIVE HYDROGENATION



TOTAL HYDROGENATION



CRACKED GASOLINE HYDROGENATION



	Applications	Material	Shape
SELECTIVE HYDROGENATION			
LT 279	C ₂ and C ₃ cuts selective hydrogenation, vapor phase	Pd, Al ₂ O ₃	S
LD 273	C ₃ cut selective hydrogenation	Pd, Promotor, Al ₂ O ₃	S
LD 267 R	Butadiene hydrogenation with 1-Butene isomerization	Pd, Al ₂ O ₃ , ready to use	S
LD 269	Butadiene hydrogenation with 1-Butene isomerization	Pd, Al ₂ O ₃	S
LD 271	Butadiene hydrogenation with maximum 1-Butene yield	Pd, Promotor, Al ₂ O ₃	S
LD 277	Raw C ₄ cut Acetylenes selective hydrogenation	Pd, Promotor, Al ₂ O ₃	S
LD 2773	FCC C ₄ /C ₅ cuts or Phenylacetylene selective hydrogenation	Pd, Promotor, Al ₂ O ₃	S
LD 265	Olefins hydrogenation & Diolefins selective hydrogenation	Pd, Al ₂ O ₃	S
LD 465	C ₅ ⁺ cuts liquid phase hydrogenation	Pd, Al ₂ O ₃	S
LD 485	C ₅ ⁺ cuts liquid phase hydrogenation	Pd, Al ₂ O ₃	S
LD 241	C ₅ ⁺ cuts liquid phase hydrogenation	Ni, Al ₂ O ₃	S
LD 341	C ₅ ⁺ cuts liquid phase hydrogenation	Ni, Al ₂ O ₃	S
LD 541	C ₅ ⁺ cuts liquid phase hydrogenation	Ni, Al ₂ O ₃	ML
TOTAL HYDROGENATION			
LD 412 R	Olefins & Aromatics hydrogenation	Pt, Al ₂ O ₃ , ready to use	C
LD 902	Olefins & Aromatics hydrogenation	Pt, Al ₂ O ₃	C
AX 746	Olefins & Aromatics hydrogenation	Ni, Al ₂ O ₃	ML
LD 746	Olefins & Aromatics hydrogenation	Ni, Al ₂ O ₃	ML
CRACKED GASOLINE HYDROGENATION			
LD 145	Olefins & Diolefins hydrogenation	NiMo, neutral Al ₂ O ₃	S
HR 606	HDS, HDN and Olefins saturation	CoMo, Al ₂ O ₃	ML

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CATALYSTS SPECIALIZED APPLICATIONS

	 OIL REFINING	 PETROCHEMICALS	 GASES	 ALTERNATIVES & RENEWABLES	 WATER
HETEROGENEOUS OLIGOMERIZATION	✓	✓			
HOMOGENEOUS OLIGOMERIZATION	✓	✓			
CYCLOHEXANE PRODUCTION		✓			
LINEAR ALKYL BENZENES (LAB)		✓			
SWEETENING	✓		✓		
BIODIESEL PRODUCTION				✓	
ENVIRONMENT	✓	✓	✓		

	Applications	Material	Shape
HETEROGENEOUS OLIGOMERIZATION			
IP 811	Olefins oligomerization to Gasoline and/or Middle Distillates (Polynaphtha™)	Proprietary	ML
TA 801	Olefins oligomerization to Gasoline and/or Middle Distillates (OATS)	Proprietary	S
HOMOGENEOUS OLIGOMERIZATION			
LC 1252	C ₃ or C ₄ Olefins dimerization (Dimersol®)	Proprietary	L
LC 1255	C ₃ or C ₄ Olefins dimerization (Dimersol®)	Proprietary	L
LC 2253	Ethylene dimerization to 1-Butene (AlphaButol®)	Proprietary	L
LC 2254	Ethylene dimerization to 1-Butene (AlphaButol®)	Proprietary	L
LC 4101	Ethylene trimerization to 1-Hexene (AlphaHexol®)	Proprietary	L
LC 4201	Ethylene trimerization to 1-Hexene (AlphaHexol®)	Proprietary	L
CYCLOHEXANE PRODUCTION			
HC 1025	Benzene hydrogenation	Proprietary	L
LD 143	Benzene hydrogenation	Ni, Al ₂ O ₃	L
LINEAR ALKYL BENZENES (LAB)			
DP 815	Dehydrogenation of linear Paraffins	Promoted Pt, Sn on Al ₂ O ₃	S
SWEETENING			
LCPS 30	Sweetening of LPG, NGL, Naphtha, Middle Distillates (for extraction and fixed bed sweetening processes)	Sulfonated Cobalt Phtalocyanine	L
SCPS Ready	Fixed bed sweetening of LPG, NGL, Naphtha & Middle Distillates	Sulfonated Cobalt Phtalocyanine on activated carbon	G
BIODIESEL PRODUCTION			
STR 111	Transesterification of Vegetable Oils	Mixed Oxide of Aluminium and Zinc	C
ENVIRONMENT			
DN 115	DeNOx catalyst	Proprietary	S
ADN 101	DeNOx catalyst	Proprietary	C

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GRADING

					
	OIL REFINING	PETROCHEMICALS	GASES	ALTERNATIVES & RENEWABLES	WATER
INERT GRADING	✓	✓			
ACTIVE GRADING	✓	✓			
SITRAP® SERIES	✓	✓			
ARSENICTRAP™ SERIES	✓	✓			

	Applications	Material	Shape
INERT GRADING			
Ceramic Balls	Bed topping	Ceramic	S
Ceramic Balls HR	Bed topping for high pressure units	Ceramic	S
Alumina Balls	Bed topping	Al ₂ O ₃	S
ACT 068	Speciality bed topping	Ceramic	PT
ACT 069	Speciality bed topping	Ceramic	PT
ACT 077	Speciality bed topping	Al ₂ O ₃ , macroporous	FR
ACT 078	Speciality bed topping	Ceramic	FR
ACT 108	Speciality bed topping	Ceramic	HC
ACT 139	Speciality bed topping	Al ₂ O ₃ , macroporous	S
ACTIVE GRADING			
ACT 153	First stage pyrolysis gasoline units; Gums & Polymer formation control	Pd, Al ₂ O ₃	S
ACT 925	Olefins & Diolefins saturation; Gums & Polymer formation control	NiMo, Al ₂ O ₃	HC/ML
ACT 935	Olefins & Diolefins saturation; Gums & Polymer formation control	NiMo, Al ₂ O ₃	HC
ACT 945	Olefins & Diolefins saturation; Gums & Polymer formation control	NiMo, Al ₂ O ₃	S
ACT 955	Olefins & Diolefins saturation; Gums & Polymer formation control	NiMo, Al ₂ O ₃	ML
SITRAP® SERIES			
SiTrap® ACT 901	Metal (Silica) trap, maximum performances	Al ₂ O ₃	ML
SiTrap® ACT 921	Metal (Silica) trap, maximum performances	NiMo, Al ₂ O ₃	ML
SiTrap® ACT 971	Metal (Silica) trap	NiMo, Al ₂ O ₃	ML
SiTrap® ACT 981	Metal (Silica) trap	NiMo, Al ₂ O ₃	ML
SiTrap® ACT 991	Metal (Silica) trap	CoMoNi, Al ₂ O ₃	ML
ARSENICTRAP™ SERIES			
ArsenicTrap™ ACT 979	Metal (Arsenic) trap	Proprietary	S
ArsenicTrap™ ACT 989	Metal (Arsenic) trap	NiMo, Al ₂ O ₃	ML

Shape: **C** Cylindrical Extrudate • **FR** Fluted Ring • **G** Granule • **HC** Hollow Cylinder • **L** Liquid • **ML** Multilobe Extrudate • **PT** Penta Ring • **S** Sphere

ADSORBENTS DRYING & PURIFICATION

	 OIL REFINING	 PETROCHEMICALS	 GASES	 ALTERNATIVES & RENEWABLES	 WATER
AXSORB® - DRYING SERIES	✓	✓	✓	✓	
AXSORB® - PURIFICATION SERIES	✓	✓	✓	✓	
AXSORB® - SPECIALITY SERIES	✓	✓			
ACTIGUARD™ - WATER TREATMENT SERIES					✓

	Applications	Material	Shape
AXSORB® - DRYING SERIES			
AxSorb® A / AB	Air, Gas & Liquid drying	Activated Alumina	S
AxSorb® D / DB	Air, Gas & Liquid drying	Activated Alumina	S
AxSorb® 510	Special adsorbent for the multibed technology	Activated Alumina	S
AxSorb® 531	Gas & Liquid selective drying	Molecular Sieves	C
AxSorb® 533	Gas & Liquid selective drying	Molecular Sieves	S
AxSorb® 537	Cracked Gas & Olefins drying	Molecular Sieves	C
AxSorb® 541	Gas & Liquid drying	Molecular Sieves	C
AxSorb® 543	Gas & Liquid drying	Molecular Sieves	S
AXSORB® - PURIFICATION SERIES			
AxSorb® 900	Polar compounds removal from Gas & Liquids	Proprietary Hybrid	S
AxSorb® 902	Polar compounds removal from Gas & Liquids	Proprietary Hybrid	S
AxSorb® 911	CO ₂ , Sulfur, Nitrogen & Oxygenates compounds removal	Molecular Sieves	C
AxSorb® 913	CO ₂ , Sulfur, Nitrogen & Oxygenates compounds removal	Molecular Sieves	S
AxSorb® 920	TBC removal from monomers	Activated Alumina	S
AxSorb® 926	TBC removal from monomers	Promoted Alumina	S
AxSorb® 951	Hydrogen purification & NG/NGL sweetening	Molecular Sieves	C
AxSorb® 980	CO ₂ & Sulfur removal from Gas & Liquids	Promoted Alumina	S
AxSorb® 984	CO ₂ & Sulfur removal from Gas & Liquids	Promoted Alumina	S
AxSorb® 990	Water & CO ₂ removal for Air Separation Unit	Promoted Alumina	S
AXSORB®- SPECIALITY SERIES			
AxSorb® 311	Hydrogen peroxide & working solution purification	Promoted Alumina	S
AxSorb® 312	Hydrogen peroxyde & working solution purification	Promoted Alumina	G
AxSorb® 330	Alcohol dehydration	Proprietary	S
AxSorb® 351	N-iso paraffins separation	Molecular Sieves	C
ACTIGUARD™ - WATER TREATMENT SERIES			
ActiGuard™ AA400G	Arsenic & Fluoride removal from water	Activated Alumina	G
ActiGuard™ AAFS50	Arsenic & Metals removal from water	Proprietary Promoted Alumina	G
ActiGuard™ 320	Fluoride removal for bottled water plant	Proprietary Alumina	ML

Shape: **C** Cylindrical Extrudate • **FR** Fluted Ring • **G** Granule • **HC** Hollow Cylinder • **L** Liquid • **ML** Multilobe Extrudate • **PT** Penta Ring • **S** Sphere

ADSORBENTS SELECTIVE CONTAMINANTS REMOVAL (GUARD BEDS)

	 OIL REFINING	 PETROCHEMICALS	 GASES	 ALTERNATIVES & RENEWABLES	 WATER
AXTRAP™ - ARSINE SERIES	✓	✓	✓	✓	
AXTRAP™ - MERCURY SERIES	✓	✓	✓	✓	
AXTRAP™ - FLUORIDE SERIES	✓				
AXTRAP™ - CHLORIDE SERIES	✓	✓	✓	✓	
AXTRAP™ - SULFUR SERIES	✓	✓	✓	✓	
AXTRAP™ - SULFUR SCAVENGER SERIES	✓	✓	✓	✓	

	Applications	Material	Shape
AXTRAP™ - ARSINE SERIES			
AxTrap™ 191	Arsine, Phosphine & COS removal	PbO, Al ₂ O ₃	S
AxTrap™ 192	Arsine, Phosphine & Sulfur removal from Propane & Propylene	CuO, Al ₂ O ₃	S
AxTrap™ 194	Arsine, Phosphine & Sulfur removal from Propane & Propylene	CuO, Al ₂ O ₃	S
AXTRAP™ - MERCURY SERIES			
AxTrap™ 273	Mercury removal from Gas & Liquid streams	Proprietary	S
AxTrap™ 277	Mercury removal from Gas, Syngas & reduced atmosphere	Proprietary	S
AxTrap™ 283	Mercury removal from Gas & Liquid streams	Proprietary	S
AXTRAP™ - FLUORIDE SERIES			
AxTrap™ 601	HF & Fluoride removal	Activated Alumina	S
AxTrap™ 602	HF & Fluoride removal	Promoted Alumina	S
AxTrap™ 612	HF & Fluoride removal	Promoted Alumina	S
AXTRAP™ - CHLORIDE SERIES			
AxTrap™ 813	HCl and organic chloride removal	Proprietary	S
AxTrap™ 860	HCl removal from Hydrogen rich gas, LPG & Reformate	Promoted Alumina	S
AxTrap™ 867	HCl removal from Hydrogen rich gas, LPG & Reformate	Promoted Alumina	S
AXTRAP™ - SULFUR SERIES			
AxTrap™ 401	H ₂ S removal from Gas & Syngas	Proprietary ZnO	C
AxTrap™ 403	Sulfur removal from Liquid streams	Proprietary reduced Ni	C
AxTrap™ 405	Sulfur removal from Liquid streams	Proprietary reduced Ni	C
AxTrap™ 407	Sulfur removal from Natural Gas	Proprietary Mixed Metal Oxide	C
AXTRAP™ - SULFUR SCAVENGER SERIES			
AxTrap™ 4000	Removal of H ₂ S from Gas streams	Proprietary Mixed Metal Oxide	G
AxTrap™ 4001/4002	Removal of H ₂ S and light mercaptans from Gas streams	Proprietary Mixed Metal Oxide	G
AxTrap™ 4003	Removal of H ₂ S and light mercaptans from biogas	Proprietary Mixed Metal Oxide	G
AxTrap™ 4002 L/4003 L	Removal of H ₂ S, light mercaptans and other contaminants from liquid hydrocarbon streams and gases	Proprietary Mixed Metal Oxide	G
AxTrap™ 4011/4012	Removal of H ₂ S, mercaptans and low levels of heavy organic Sulfur from Gas streams	Proprietary Mixed Metal Oxide	G
AxTrap™ 4013 L	Removal of H ₂ S and mercaptans, from clear liquid Hydrocarbon streams such as LPG, NGL, Gasoline, Kerosene and Solvents	Proprietary Mixed Metal Oxide	G
AxTrap™ 4101/4102	Removal of larger amounts of H ₂ S from Gas streams	Proprietary Mixed Metal Oxide	G
AxTrap™ 4503	Removal of H ₂ S and other sulfur compounds from dry gas streams and liquid hydrocarbons	Proprietary Mixed Metal Oxide	G
AxTrap™ 4513	Removal of H ₂ S, and lower levels of mercaptans and some heavy organic Sulfur from Gas streams	Proprietary Mixed Metal Oxide	G
AxTrap™ 4523	Removal of total Sulfurs in dry gas streams	Proprietary Mixed Metal Oxide	G

Shape: **C** Cylindrical Extrudate • **FR** Fluted Ring • **G** Granule • **HC** Hollow Cylinder • **L** Liquid • **ML** Multilobe Extrudate • **PT** Penta Ring • **S** Sphere

OIL REFINING



PETROCHEMICALS



GASES



ALTERNATIVES
& RENEWABLES



WATER



Axens is a Group providing a complete range of solutions for the conversion of oil and biomass to cleaner fuels, the production and purification of major petrochemical intermediates as well as all of natural gas treatment and conversion options. The integrated offer includes technologies, equipment, furnaces, modular units, catalysts, adsorbents and related services, commercialized under “Axens Solutions”, “Heurtey Petrochem Solutions” and “Axens Horizon” brands.