

A large, cylindrical industrial tank is being lifted by a yellow crane in a factory. The crane has "KONE CRANES" written on it. The tank is suspended by cables and is positioned in the center of the frame. The background shows the factory's interior with yellow beams and various equipment.

# SEMI-FINISHED PRODUCTS

Sheets, Round Bars, Welding Rods



For more information about Agru America  
and our products, visit [agruamerica.com](http://agruamerica.com)



## Worldwide Excellence in Plastics and Geosynthetics

Agru America is a family-owned company with worldwide experience in production and sale of high-quality thermoplastic polymer products. We are competent in semi-finished products made out of PP, PP-s, PP-s-el, PP-B 2222, PP foamed, PE 100, PE 100-RC, HDPE-el, PVDF, PVDF-Flex and ECTFE.

Sheets, round bars and welding rods are produced on the world's most modern production lines. Our large production range, modern stock and logistic capability enable fast and technically perfect solutions for many applications worldwide.

Agru America ensures the best quality by adhering to the quality management system ISO 9001:2008.



## High Quality & Quick Delivery

Raw material is an important factor in the production of semi-finished products. Agru America only uses the highest-quality raw materials from preferred suppliers. Our PE 100 extruded sheets, for example, fulfill the highest-quality requirements and are verified by the DIBt approval Z-40.26-454. Likewise, our PVDF semi-finished products are listed according to FM 4910.



## Advantages:

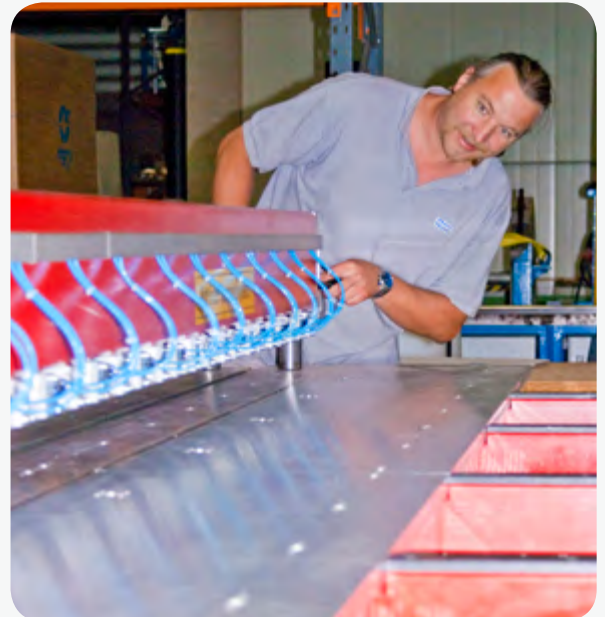
- Largest product range
- Highest-grade raw materials for PE 100-RC, PVDF, ECTFE, etc.
- Void-free products verified by ultrasonic inspection
- Clean products
- Exact sheet parallelism
- Excellent thermoforming characteristics
- Perfect round bar roundness
- High homogeneity
- Excellent packaging
- Light weight
- High-aging resistance
- Excellent chemical resistance
- Outstanding weldability
- Excellent abrasion resistance
- Low-friction coefficient
- High-mechanical strength
- Good thermoforming properties
- Flexibility
- Excellent insulating features
- Physiologically harmless





## Sheets, round bars, welding rods for large application fields:

- Galvanic and pickling tanks
- Gas washer and exhaust even systems
- Apparatus construction
- Tank construction
- Lining for reactors, basins and tanks
- Lining for centrifugals and scrubbers
- Assembly for exhaust vent systems and ventilators
- Wet bench and process plants
- Base product for machined parts
- Thermoforming products
- Light construction systems
- Cutting plates





## Universally Applicable

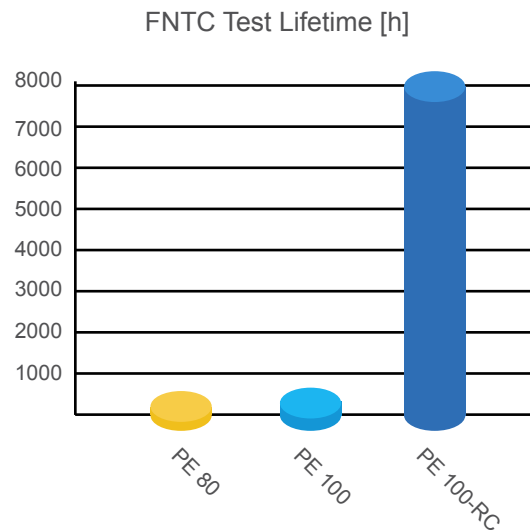
Agru America semi-finished products made out of thermoplastics offer outstanding and durable solutions for the modern and high-quality installation of apparatus and tank constructions as well as for the assembly of abrasion resistant constructions.

Chemical and heavy industries often request different properties concerning acid and alkali

resistance, temperature changes, and static loads when applied in explosive areas (ATEX). Agru America semi-finished products made out of PE, PP, PVDF and ECTFE have been successfully used in these sensitive areas for many years. For fabrication, several approved joining technologies such as extrusion, hot gas and butt welding are applicable.

## The New Generation: PE 100-RC

As a further development for the construction of high-grade apparatuses and tanks, Agru America now offers PE 100-RC sheets and welding rods. This material shows excellent values regarding FNCT "Full Notch Creep Test" behavior. Another advantage of this new product is it's higher strength when compared to PE 80 sheets. This results in lower wall thickness and additional advantages in processing and transportation.





## Specific Material Properties

Property	PE 100	PP-H	PP-R	PP-B 2222
Density [g/cm <sup>3</sup> ]	0.96	0.91	0.91	0.91
Tensile strength [MPa]	25	30	25	26
E-modulus [MPa]	1100	1300	900	1100
Expansion [K <sup>-1</sup> x 10 <sup>-4</sup> ]	1.8	1.6	1.6	1.6
UV-resistant	Yes	No	No	No
Standard Color	Black	Grey	Grey	Grey

Property	PE-el	PP-s	PVDF	ECTFE
Density [g/cm <sup>3</sup> ]	0.99	0.93	1.78	1.68
Tensile strength [MPa]	26	30	50	30
E-modulus [MPa]	1150	1300	2000	1690
Expansion [K <sup>-1</sup> x 10 <sup>-4</sup> ]	1.8	1.6	1.2	0.8
UV-resistant	Yes	No	Yes	Yes
Standard Color	Black	Grey	Natural	Natural



Extruded Sheets					
	Sheet 2m x 1m	Sheet 3m x 1.5m	Sheet 4m x 2m	Roll 25m x 1m	Roll 25m x 1.5m
PP-H Grey (RAL 7032)	2 - 40mm	3 - 40mm	3 -35mm		
PP-H Grey Polyester Fabric Backed (RAL 7032)	3 - 6mm	3 -6mm		3 - 4mm	3 - 4mm
PP-H Grey PP Fabric Backed (RAL 7032)		3 - 6mm			3 - 4mm
PP-R Greg (RAL 7032)			40mm		
PP Natural	2 - 25mm	3 - 25mm			
PP White (RAL 9003)	6 - 20mm	6 - 20mm			
PP-s-el Black	3 - 20mm	4 - 15mm			
PP-B 2222 Grey Polyester Fabric Backed (RAL 7032)		4mm			
PP-B 2222 Grey, PP Fabric Backed (RAL 7032)		4mm			
PE 100 Black	2 - 30mm	3 - 30mm	3 - 30mm		
PE 100 Black Polyester Fabric Backed		5mm			
PE 100-RC Black	35 - 40mm	3 - 50mm	12 - 40mm		
PE 100 Natural	3 - 25mm	3 - 20mm			
HDPE-el Black	3 - 20mm				
PVDF Natural	2 - 20mm	3 - 5mm			
PVDF Natural Polyester Fabric Backed	3 - 5mm	3 - 4mm		2 - 3mm	3mm
PVDF-Flex Natural Polyester Fabric Backed		3mm			



ECTFE Natural	1.5 - 2.3mm				
ECTFE Natural Glass Fabric Backed	2.3 - 3mm	2.3 - 3mm		2.3 - 3mm	2.3mm

Pressed Sheets		
	Sheet 2m x 1m	Sheet 4m x 2m
PP-H Grey (RAL 7032)	10 - 60mm	3 -35mm
PP-R Grey (RAL 7032)	70 - 120mm	
PP Natural	10 - 60mm	15 - 60mm
PP-s Grey (RAL 7032)	25 - 40mm	
PE 100 Black	10 - 120mm	15 - 70mm
PE 100 Natural	10 - 80mm	15 - 70mm
HDPE-el Black	25 - 60mm	
PVDF Natural	10 - 50mm	
ECTFE Natural	10 - 30mm	

PE 100 and PE 100-RC pressed sheets are available on request.





## Extruded Round Bars & Welding Rods

Material					
	Round Bar L = 1m	Welding Rod Circular Roll	Welding Rod Circular 1m Bar	Welding Rod Triangle Roll	Welding Rod Oval Roll
PP-H Grey (RAL 7032)		3 - 5mm			
PP-R Grey (RAL 7032)	15 - 315mm	3 - 5mm	3 - 4mm	5x3 & 6x4mm	5x3 & 6x4mm
PP Natural		3 - 4mm			
PP White (RAL 9003)		3 - 4mm			
PP-s Grey (RAL 7037)		3 - 4mm			
PP-s-el Black	20 - 80mm	3 - 4mm			
PP-B 2222 Gray (RAL 7032)		3 - 4mm			
PE 100 Black	15 - 315mm	3 - 5mm			
PE 100-RC Black		3 - 5mm			
PE 100 Natural		3 - 4mm			
HDPE-el Black	50 - 160mm	3 - 4mm			
PVDF Natural	20 - 300mm	3 - 4mm	3mm		
PVDF-Flex Natural		3mm			
ECTFE Natural	20 - 65mm	3 - 4mm			
AGRUPlast Purging Rod		4mm			

For more information on Agru Semi-Finished Products and other Agru products, please reach out to us.



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