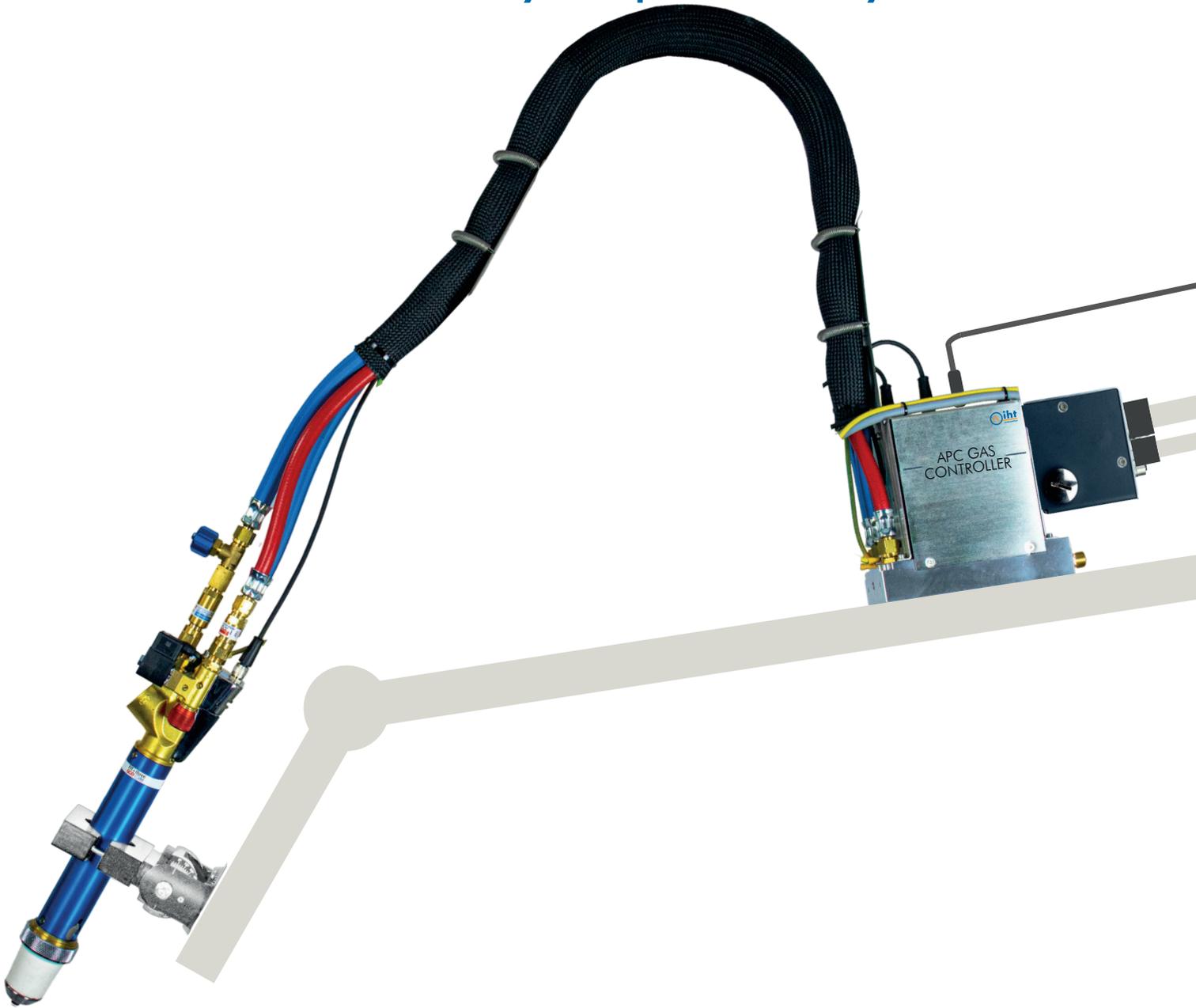


Act Now!

It's time to increase your productivity.

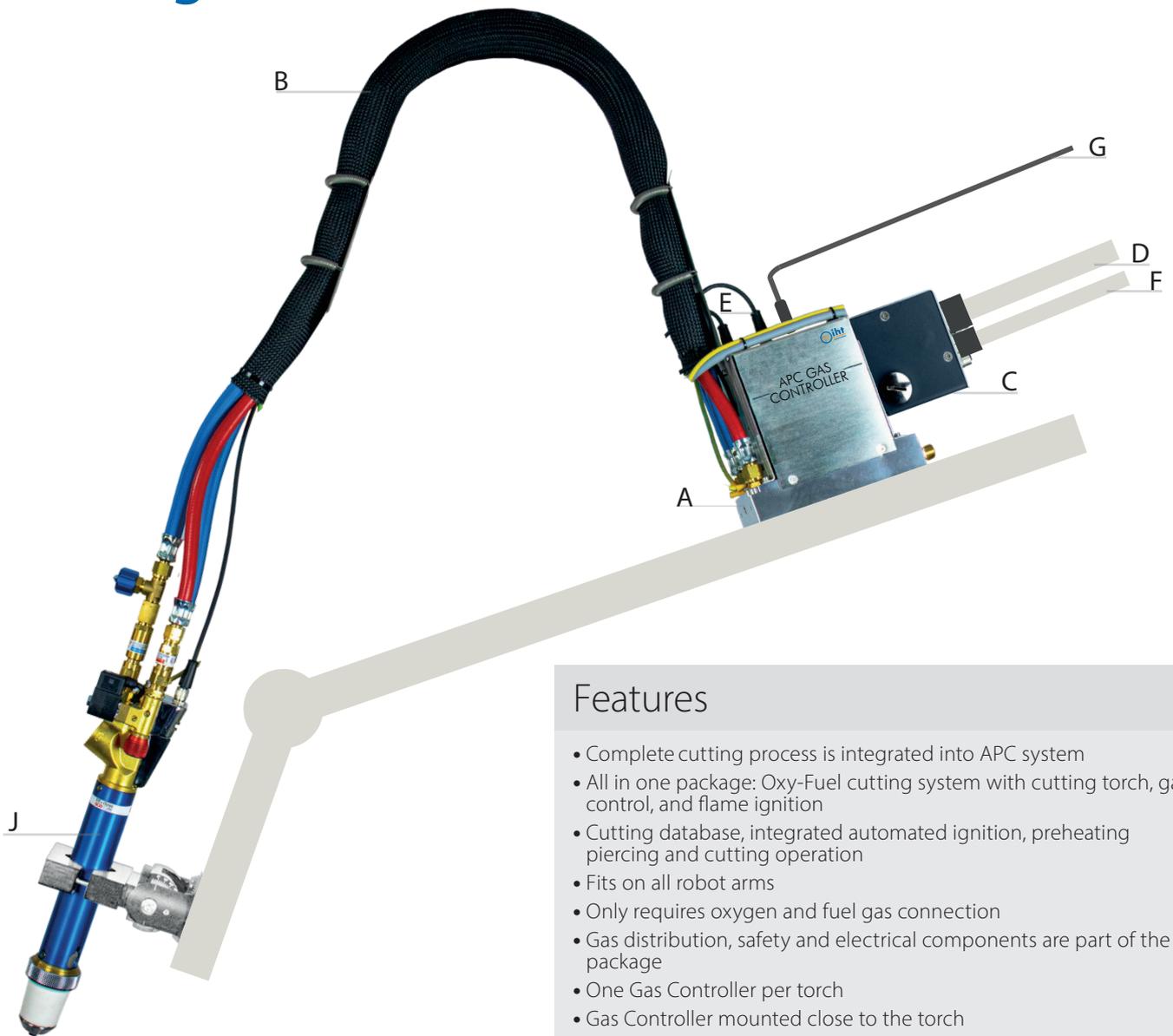


APC for ROBOT Application

Automatic Process Control for
Oxy-Fuel Cutting



Automatic Process Control for Oxy-Fuel Cutting with a Robot



Features

- Complete cutting process is integrated into APC system
- All in one package: Oxy-Fuel cutting system with cutting torch, gas control, and flame ignition
- Cutting database, integrated automated ignition, preheating piercing and cutting operation
- Fits on all robot arms
- Only requires oxygen and fuel gas connection
- Gas distribution, safety and electrical components are part of the package
- One Gas Controller per torch
- Gas Controller mounted close to the torch
- Works with all common CNC controllers on the market
- Modular approach allows highest flexibility
- Cutting close to edge and kerf
- Best in class height sensor for dry cuts
- Flash back detection to extend torch lifetime
- In cutting torch integrated ignition
- Tool free nozzle exchange, highspeed, high quality cutting

Application Fields

- Oxy-Fuel cutting robots for cutting of up to 300 mm sheets
- Straight cutting, bevelling, 3D cutting, scrapping
- Single or multi torch applications
- Solution for new robots and retrofits
- Plate piercing up to 100 mm thickness with active Height Sensor and up to 150 mm with Splash Protector (vertically, downwards oriented torch)
- Cutting from the edge with active Height Sensor up to 300 mm plate thickness (vertically, downwards oriented torch)

APC System Configurations

APC O3F with dedicated Operator Terminal

- Cutting database for FIT+ three torches is stored in Operator Terminal
- APC operator interface software is embedded in Operator Terminal
- Hassle free interface to CNC, only "Start Process" and "Start Piercing" from CNC and "Ok to Move" from APC required

APC C3F Operator Interface software integrated into CNC

- APC Cutting database for FIT+ three torches is implemented in machine control (CNC or PLC)
- APC operator interface is embedded in CNC
- APC with flexible fieldbus interface to connect to CNC*
- Hassle free interface to CNC, only "Start Process" and "Start Piercing" from CNC required and "Ok to Move" from APC required
- Powerful DLL communication package for data exchange between CNC and APC software available

Please ask supplier for more system configurations

* For fieldbus connectivity details please ask supplier

CNC Connections

- In: Start Process
- In: Start Piercing
- In: Clearance Adjust
- In: Torch Disable
- Out: Ok to Move
- Out: Torch Height (0-10V)
- Out: Error/Collision

Weights

	kg	lbs
Gas Controller	6,5	14,3
Gas Hose (1,5m)	2,2	4,8
Torch FIT+ three	3,5	7,7

DLL data exchange with CNC

Preheat time and height
Pierce time and height
Cutting height and speed
Kerf and lead in length

AUTOMATIC PROCESS CONTROL SYSTEM

Item No.	Description	APC O3F	APC C3F	Position
101367	Gas Controller	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	A
140801	Gas Hose Assembly (1.5m)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	B
100685	Control Unit+ ROB FB	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	C
100196	Linear drive cable, IHT 7500-2-901 (10/20/30m)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D
140525	DIG Cable, RS485 (1m)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E
140539	FB-RS cable (10/20/30 m)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	F
140527	Extension cable M12 4pin (10/20/30m)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	G
140110	Sensor Torch FIT+ three 220/45PMY DIG (cutting torch with digital torch controller)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	J
140111	Sensor Torch FIT+ three 220/45A DIG (cutting torch with digital torch controller)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	J
100797	Tool-Free Heating Nozzle GSF 3-150 APMY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	J
101021	Power supply 230/110VAC / 24VDC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
140822	Operator Panel APC+S	<input checked="" type="checkbox"/>		
140824	Converter USB/RS485+ ISOLATED, M12		<input checked="" type="checkbox"/>	

For accessories, spare parts, tools and heating and cutting nozzles see our FIT+ Brochure.

For straight cutting including height control see our APC brochure.



Gas Control Equipment



GCE Global Leader in Oxy-Fuel Technology

GCE is a world leading company in the field of Oxy-Fuel and Gas Control Equipment with over 100 years of experience in the handling of industrial, medical and specialty gases. The GCE Group has grown rapidly since its creation and now is a leader in the European gas equipment industry. The Group's Headquarter is based in Malmö, Sweden. The major manufacturing centres are located in the Czech Republic, China and Germany. Worldwide the Group now employs in excess of 950 people who are all ready to fulfil the expectations of their customers worldwide.

The Group's product portfolio covers a wide variety of applications, from simple pressure regulators and torches for welding and cutting, to sophisticated gas supply systems for medical and electronic industry applications. Product design is based on knowledge and expertise that has been built up in Oxy-Fuel cutting over the years with the primary concerns being safety and reliability. GCE provides innovative solutions and complete customer service.

“There is still significant potential to increase the efficiency of Oxy-Fuel cutting technology.”

Martin Roubicek
Business Development Manager

IHT Automation Focussing on Core Business

Since its creation, IHT Automation has always focused on the development of new solutions and the improvement of existing products so as to benefit its customers in the cutting industry. One area that always received special attention is the control of the height of the cutting torch. Whether cutting with Oxy-Fuel, Plasma or Laser, maintaining the correct distance between the torch and the work-piece is an often underestimated but critical factor for achieving the perfect cut.

IHT Automation realised the importance of this very early on and now relies on more than 40 years experience in the industry to ensure it provide its customers with the best technical advice and solutions. Great products combined with excellent service and unrivalled technical support makes IHT Automation your ideal partner.

“A higher level of integrated automation is the future of Oxy-Fuel cutting.”

Kurt Nachbargauer
Managing Director

GCE Cutting & Welding Technologies
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