



UCIMU-SISTEMI PER PRODURRE



# LO STATO DELLA ROBOTICA IN ITALIA E NEL MONDO

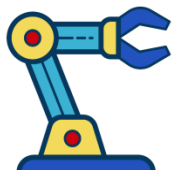
*Conferenza stampa*

**La robotica industriale nel mondo**

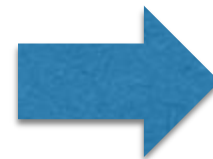
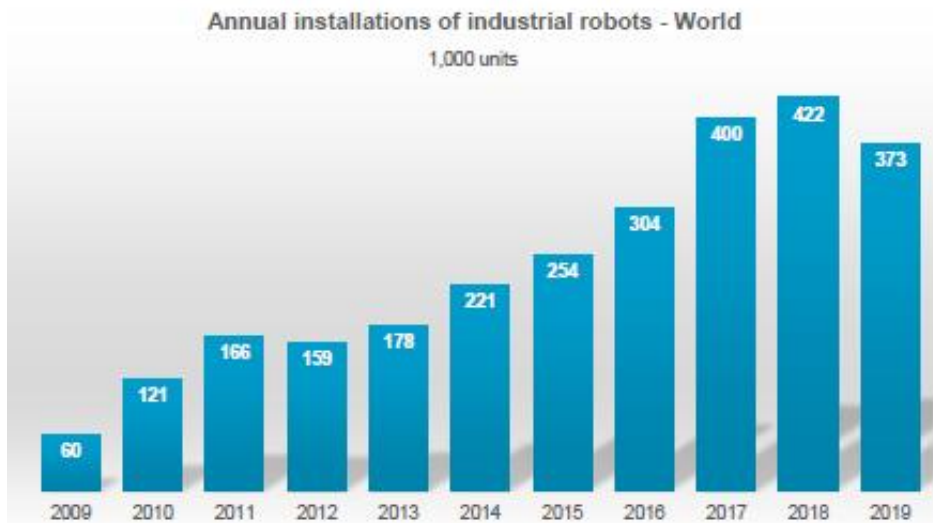
**Alessandro Santamaria**  
Executive board member di IFR

**26 maggio 2021**  
11:00 - 12:30

Publi**Tec**  
DEFORMAZIONE



# Le vendite di robot industriali degli ultimi 10 anni



**-12%**

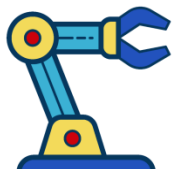
CAGR 2014-2019: +11%  
 Shares of total installations:  
 Handling operations 46%, welding 20%  
 Automotive industry 28%, electrical/electronics industry 24%, metal industry 12%

## Totale 2019:

**373.000 unità - 13,8 miliardi US\$**  
**(-17% su 2018) senza software e periferie**

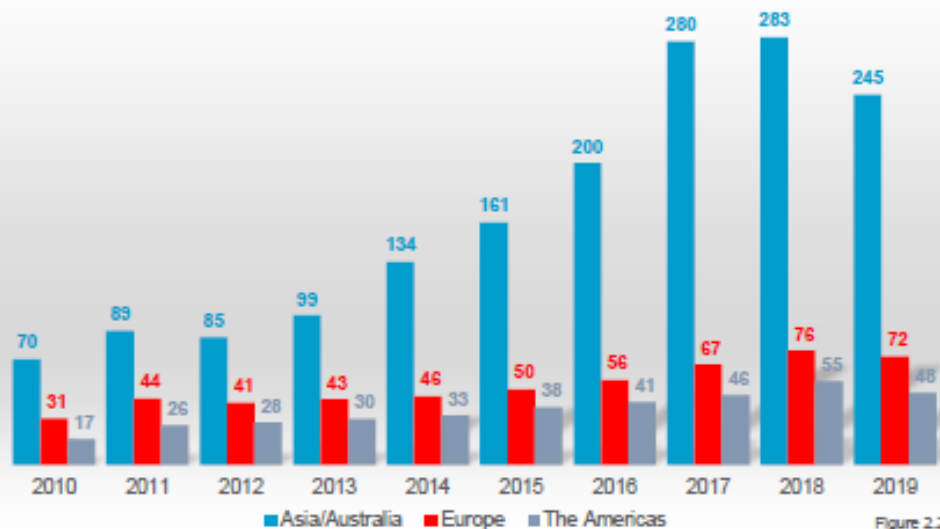


Source: World Robotics 2020

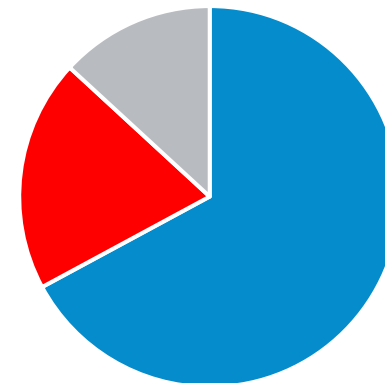


# Le vendite di robot industriali degli ultimi 10 anni

Annual installations of industrial robots  
 ('000 of units)



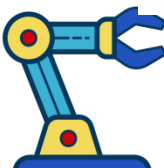
Installazioni Y2019



■ Asia & Australia ■ Europa ■ America



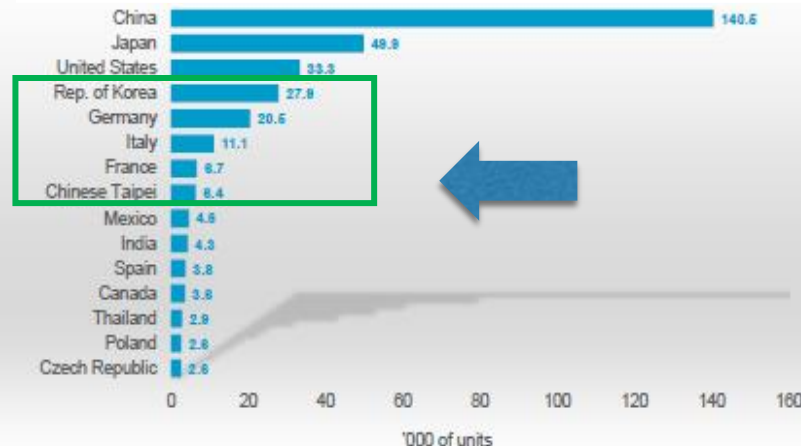
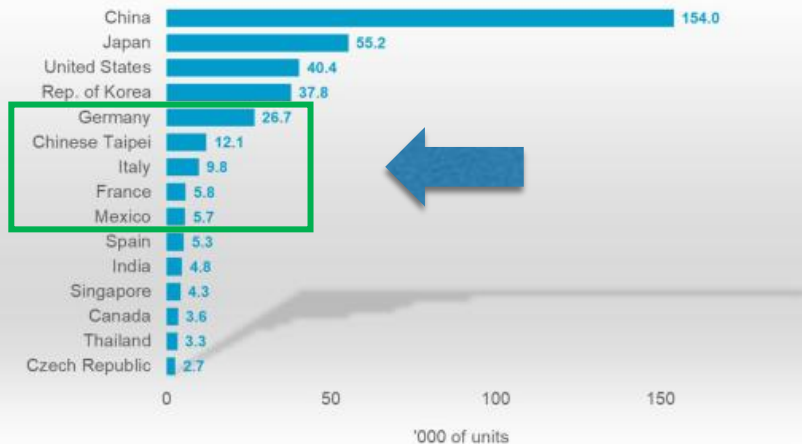
Source: World Robotics 2020



# Distribuzione 2019 dei robot industriali venduti nei 15 più importanti paesi

Dati 2018

Dati 2019

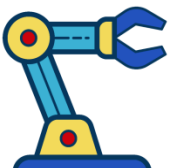


Totale 2019: 373.000 unità

Italia dal 7° al 6° posto nel mondo

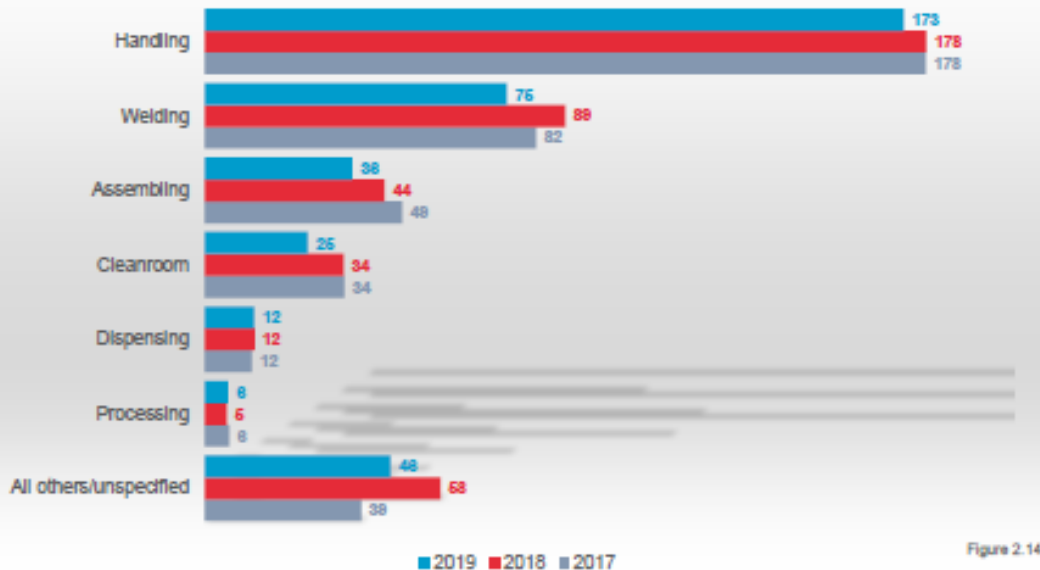


Source: World Robotics 2020



# Le vendite di robot industriali degli ultimi 3 anni: distribuzione per applicazione

Annual installations of industrial robots by application - World  
1,000 units

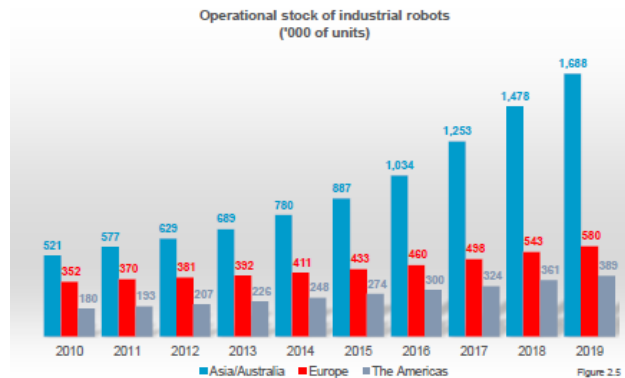
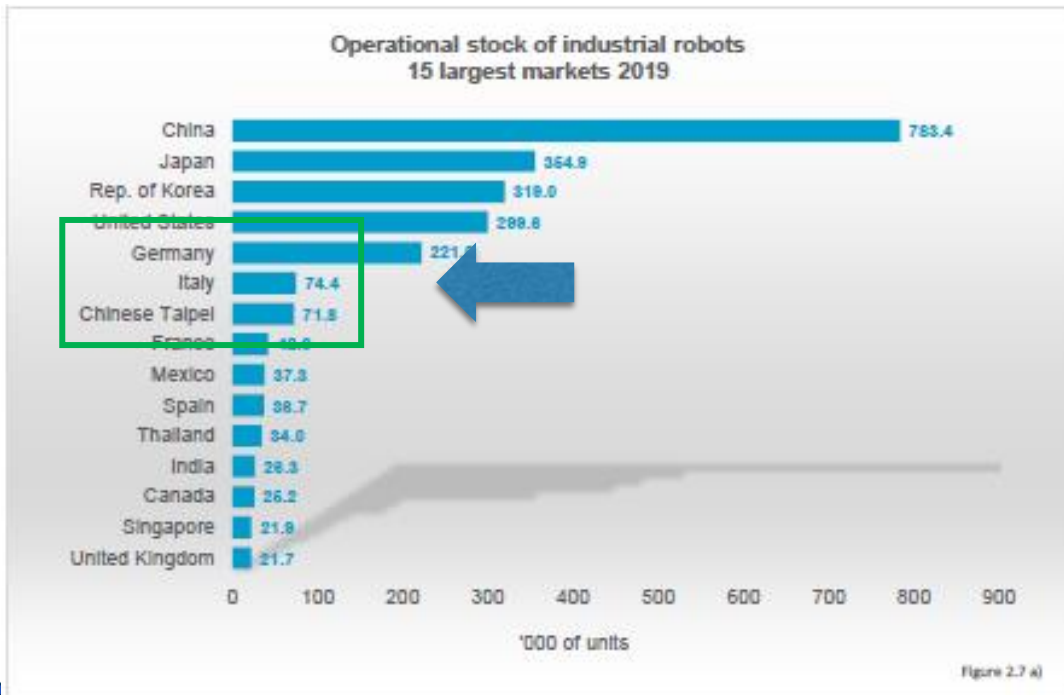


	2018	2019	%
Handling	178	173	-2,80%
Welding	89	76	-14,6%
Assembling	44	38	-13,6%
Cleanroom	34	25	-26,4%
Dispensing	12	12	=
Processing	6	8	+33,3%
All others/unspecified	68	48	-29,41%



Source: World Robotics 2020

# La popolazione di robot industriali installati nel mondo fino al 2019



2019



■ Asia/Australia ■ Europa

Totale 2019: 2.722.000 unità, +12% su 2018 (ipotesi vita media = 12 anni)

Source: World Robotics 2020



# La popolazione di robot industriali installati nel mondo fino al 2019

Operational of industrial robots by application - World  
 1,000 units

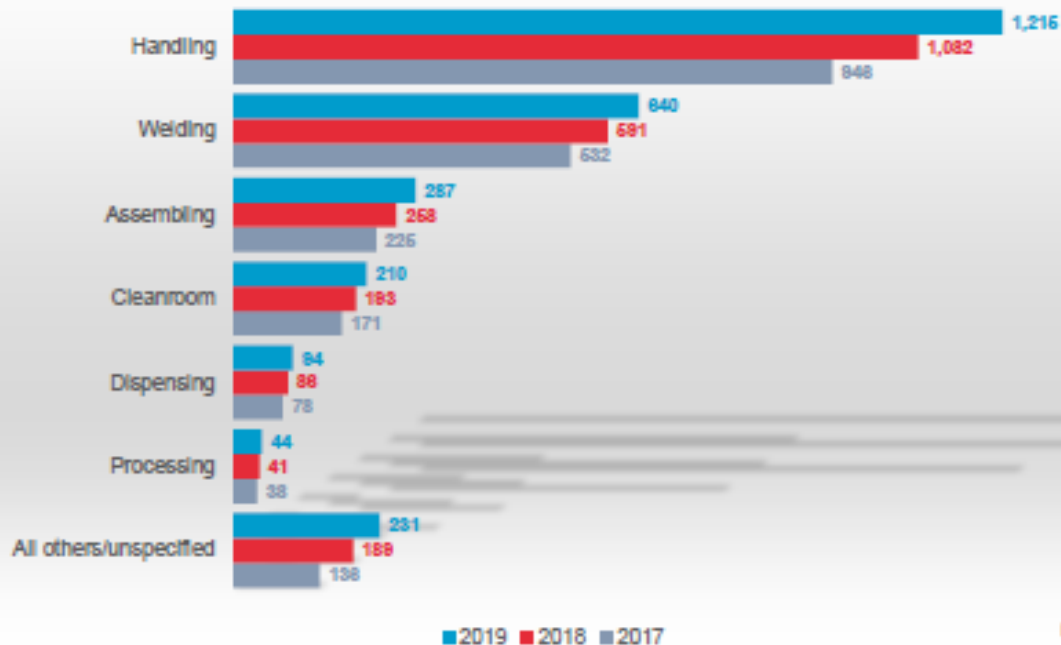
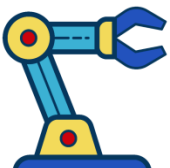


Figure 2.15

Source: World Robotics 2020



# I robot industriali installati nel mondo: distribuzione per settore industriale 2017-2019

Annual installations of industrial robots by customer industry - World  
 1,000 units

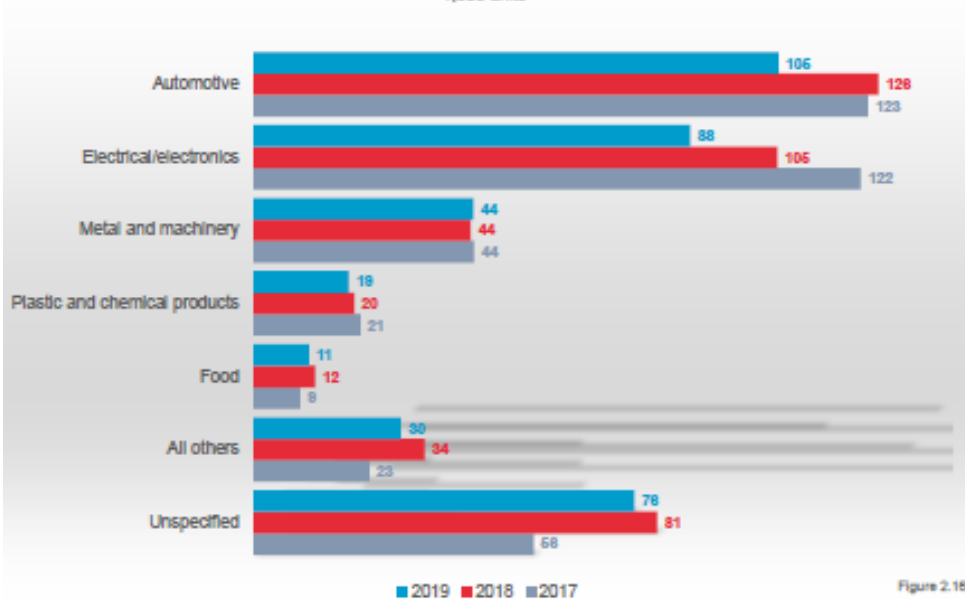
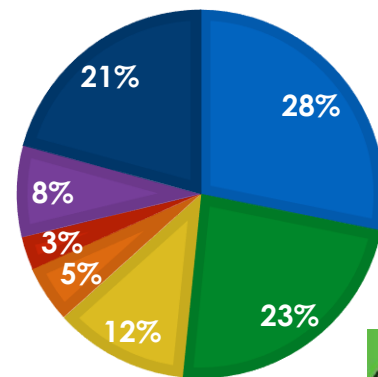


Figure 2.18

2019

- Automotive
- Electronics
- Metal and Machinery
- Plastic and chemical
- Food
- All others
- Unspecified



Totale 2019: 2.722.000 unità, +12% su 2018 (ipotesi vita media = 12 anni)

Source: World Robotics 2020



# Tasso di densità di robot nel 2019 (numero di robot che operano per 10.000 addetti)

Densità mondiale 2019: 113 robot/10.000 addetti

Robot density in the manufacturing industry 2019

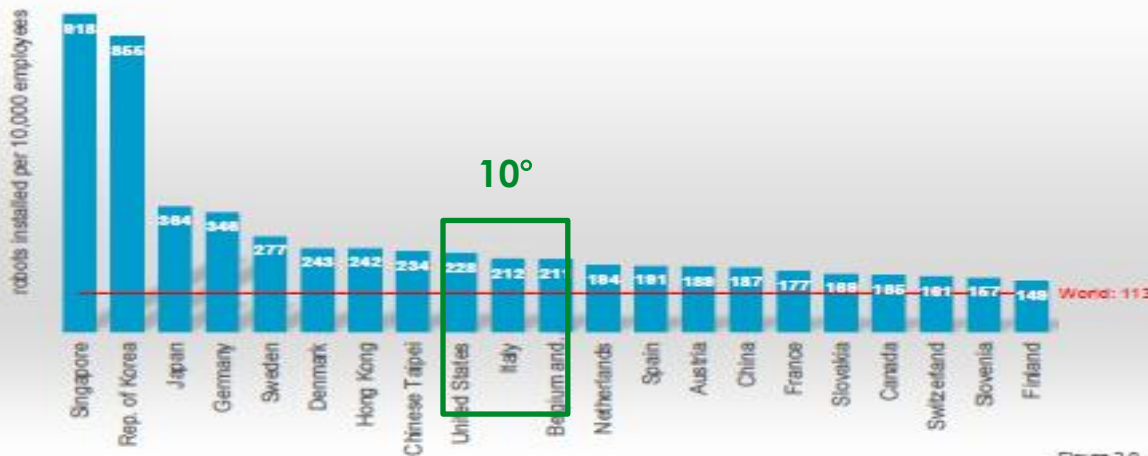
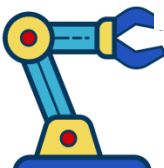


Figure 2.9

Robot density in the manufacturing industry 2019



Source: World Robotics 2020



## distribuzione per settore industriale di sbocco e confronto con i maggiori Paesi del mondo

	Automotive	Electrical/ electronic industries	Chemical industries	Metal products, basic metals and machinery	Food and beverages	All others	unspecified	Total
China	33,842	44,731	6,126	15,187	2,455	11,025	27,126	140,492
Japan	17,016	15,677	1,737	7,521	993	4,158	2,806	49,908
United States	12,960	3,460	2,491	3,785	2,224	3,491	4,928	33,339
Germany	10,226	1,250	1,998	3,683	509	1,815	992	20,473
Rep. of Korea	6,272	13,516	173	1,051	256	764	5,841	27,873
Mexico	2,815	235	556	103	39	186	628	4,562
France	2,678	237	576	1,204	353	1,348	280	6,676
Canada	1,897	93	204	285	265	429	430	3,603
India	1,851	73	201	553	29	223	1,369	4,299
Spain	1,769	52	334	473	506	467	201	3,802
Czech Republic	1,628	78	183	299	43	219	174	2,624
Italy	1,268	209	796	2,836	1,082	686	4,212	11,089
<b>World</b>	<b>105,379</b>	<b>87,712</b>	<b>19,059</b>	<b>44,061</b>	<b>11,013</b>	<b>29,531</b>	<b>76,485</b>	<b>373,240</b>

Sources: IFR and national robot associations.

12° nell'automotive ma....

5° nella chimica

3° nell'alimentare

4° nei settori non convenzionali



Source: World Robotics 2020

# I robot venduti in Italia nel 2019:

## distribuzione per applicazione e confronto con i maggiori Paesi del mondo



	Welding	Handling operations /Machine tending	thereof: material handling	thereof: plastic moulding	thereof: palletizing	thereof: packaging , picking & placing	thereof: handling operations at machine tools	Dis pens ing	Process ing	Assembly	Clean room	All others/ unspecified	Total
China	32,863	62,374	28,007	6,901	4,659	6,053	5,182	6,692	2,035	18,831	6,505	11,192	140,492
Japan	8,894	19,796	10,351	3,990	1,940	483	2,297	753	409	8,168	11,268	620	49,908
United States	7,518	15,009	6,231	1,349	805	3,321	1,377	1,111	484	2,253	2,974	3,990	33,339
Rep. of Korea	5,171	13,986	2,741	470	390	9,367	486	453	73	1,235	4,369	2,586	27,873
Germany	2,966	13,576	8,336	1,489	432	1,019	772	1,060	641	921	700	609	20,473
India	2,089	1,396	658	243	38	148	178	138	82	97	21	506	4,299
France	1,470	4,066	1,322	546	241	657	170	102	360	275	176	227	6,676
Mexico	1,373	2,052	846	523	23	219	96	409	16	104	22	586	4,562
Canada	1,198	1,736	968	58	83	277	155	72	97	52	30	418	3,603
Italy	1,135	7,483	2,233	714	1,108	1,085	1,552	158	264	943	357	749	11,089
<b>Total</b>	<b>74,655</b>	<b>172,863</b>	<b>76,826</b>	<b>20,744</b>	<b>12,039</b>	<b>25,314</b>	<b>14,495</b>	<b>12,134</b>	<b>5,739</b>	<b>36,449</b>	<b>31,974</b>	<b>39,426</b>	<b>373,240</b>

Sources: IFR and national robot associations

10°  
nella saldatura  
ma....

6° nella manipolazione di cui...

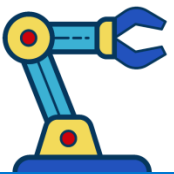
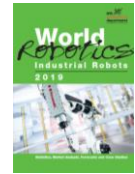
3° nell'asservimento alle MU

3° nella palletizzazione

5° nel montaggio (davanti alla Germania)

5° nelle applicazioni non convenzionali

Source: World Robotics 2020



# I robot venduti in Italia nel 2019: distribuzione per settore industriale di sbocco e confronto con i maggiori Paesi Europei

	Automotive	Electrical/electronic industries	Chemical industries	Metal products, basic metals and machinery	Food and beverages	All others	unspecified	Total
China	33,842	44,731	6,124	15,187	2,455	11,025	27,129	140,492
Japan	17,014	15,877	1,727	7,521	993	4,158	2,800	49,998
United States	12,090	3,400	2,491	3,785	2,224	3,491	4,928	33,334
Germany	10,226	1,350	1,048	3,883	500	1,815	992	20,473
Rep. of Korea	5,272	13,516	173	1,051	239	764	5,841	27,873
Mexico	2,815	235	558	103	34	180	828	4,562
France	2,678	237	578	1,204	313	1,348	280	6,978
Canada	1,867	93	204	285	295	429	430	3,603
India	1,851	73	201	853	20	223	1,360	4,254
Spain	1,769	52	334	473	506	487	201	3,802
Czech Republic	1,628	78	183	204	43	219	174	2,624
Italy	1,258	200	706	2,834	1,082	686	4,212	11,089
Poland	982	192	385	252	135	363	332	2,642
Thailand	958	393	173	224	85	183	887	2,883
South Africa	829		5	7	35	35	42	951
Turkey	781	85	197	293	82	191	207	1,794
United Kingdom	754	87	194	170	155	491	170	2,021
Brazil	752	45	135	162	100	297	318	1,818
Sweden	551	22	76	587	77	257	53	1,823
Portugal	450	9	111	48		153	93	862
Austria	363	118	134	291	21	196	252	1,475
Netherlands	362	54	91	450	474	220	134	1,785
Slovakia	352	44	45	79		72	33	638
Russian Federation	380		83	401	95	196	205	1,410
Hungary	338	86	125	219		59	98	828
Romania	296	4	77	14		74	85	525
Indonesia	274	89	54	20	48	53	157	705
Balkan Countries	250	27	54	137		114	228	820
Malaysia	152	894	79	45	18	27	177	1,102
Chinese Taipei	130	2,817	149	1,195	22	402	1,868	6,413
Belgium and Luxembourg	112	41	83	314	151	117	95	914
Vietnam	95	1,184	165	81		80	390	2,179
Switzerland	90	102	414	513	91	230	105	1,549
Singapore	42	1,254	58	222	37	114	550	2,087
Denmark	23	9	91	213	93	130	212	758
Australia/New Zealand	19	9	47	43	111	225	113	567
Finland		12	83	237		140	54	529
Norway		9	71	15	25	25	25	143
World	105,379	87,712	19,059	44,061	11,013	29,531	76,485	373,240

Source: IFR and national robot associations.

## Classifica paesi UE Automotive /G.I.

Paese	Auto motive	G.I.
1. Germania	10.226	10.247
2. Francia	2.578	3.097
3. Spagna	1.759	2.043
4. Rep. Ceca	1.628	996
5. Italia	1.258	9.831
6. Polonia	982	1.660
7. Turchia	751	1.045
8. UK	754	1.267

Annual installations of industrial robots - Italy units



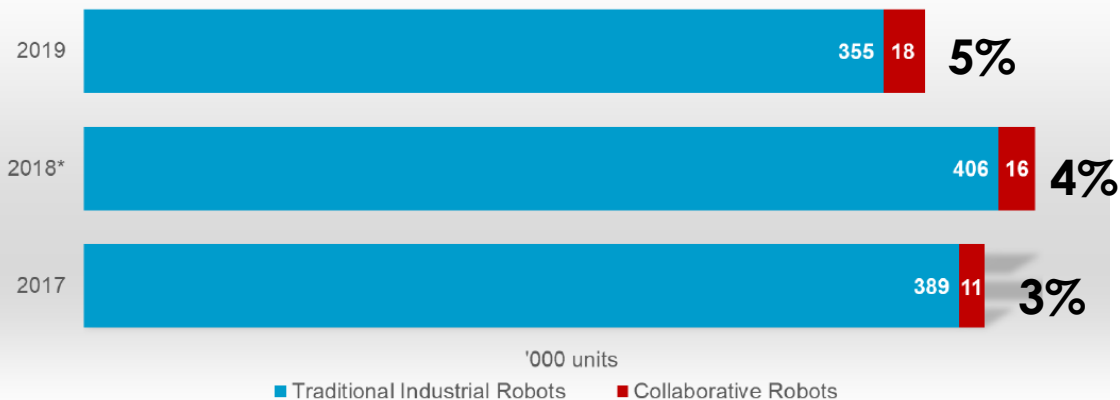
Figure Italy-1



Source: World Robotics 2020

# % su vendite totali dell'anno

Collaborative and traditional industrial robots



Source: World Robotics 2020

