

# INDUSTRIAL CONTROL

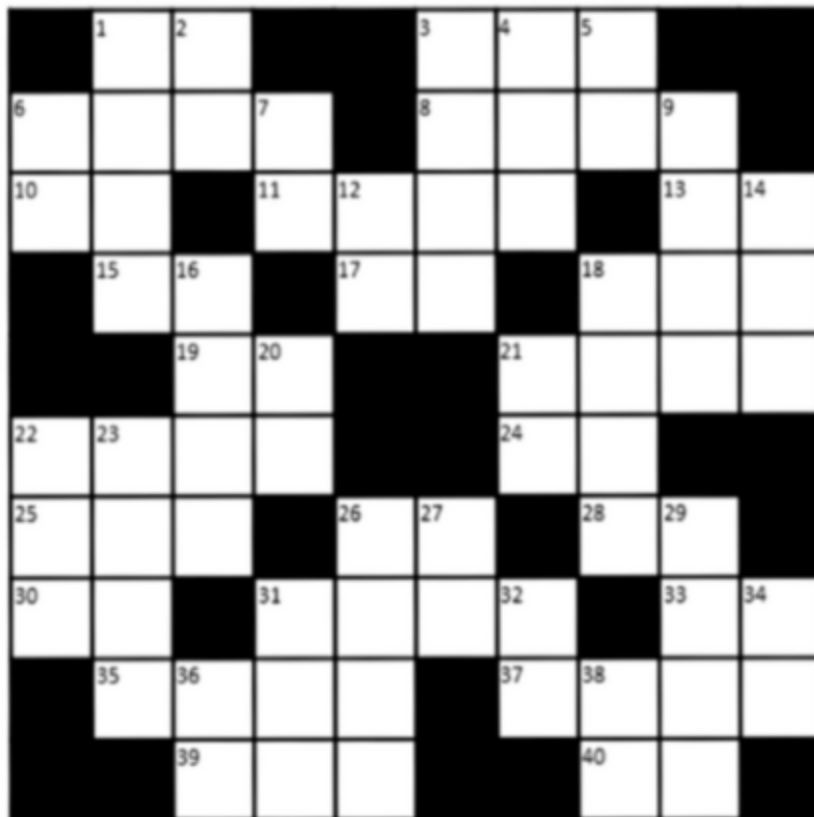
Industrial control technicians may work on almost anything, from home appliances to the three hundred horsepower motors that run conveyor belts in factories.

An aptitude for mathematics and an eye for detail will serve you well in this field!

## ESSENTIAL SKILLS

Document Use  
Thinking (Critical Thinking)  
Oral Communication





### ACROSS

1.  $22 - 9$
3.  $159 - 13$
6.  $465 + 750$
8.  $2329 + 3294$
10.  $25 - 10$
11.  $18833 - 9266$
13.  $20 - 7$
15.  $15 + 16$
17.  $120 - 24$
18.  $952 - 344$
19.  $99 - 40$
21.  $445 + 8975$

22.  $1496 + 930$
24.  $124 - 46$
25.  $1290 - 300$
26.  $98 - 44$
28.  $11 + 5$
30.  $27 + 40$
31.  $9284 - 2589$
33.  $44 - 10$
35.  $3292 - 768$
37.  $9 + 1616$
39.  $858 - 356$
40.  $1 + 10$

### DOWN

1.  $710 + 543$
2.  $46 - 15$
3.  $297 + 1269$
4.  $235 + 232$
5.  $83 - 21$
6.  $15 - 4$
7.  $29 + 30$
9.  $5457 - 2355$
12.  $24 + 35$
14.  $560 - 180$
16.  $381 + 1139$
18.  $12346 + 5865$

20.  $27 + 69$
21.  $183 - 86$
22.  $338 - 42$
23.  $280 + 4692$
26.  $10786 - 5144$
27.  $27 + 22$
29.  $12200 - 5879$
31.  $687 - 67$
32.  $62 - 11$
34.  $21 + 24$
36.  $61 - 6$
38.  $17 + 44$



# Industrial Control Activity!!

As electricity plays a routine yet major role in our lives and more and more applications of it are being discovered every day, this field offers a wide range of job possibilities. Some of these occupations are focused on the building and testing of prototypes according to general instructions and established standards, or the installation, commissioning and operation of industrial process control systems. Others involve the set up and operation of specialized and standard test equipment to diagnose test and analyze the performance of the electrical and electronic components and assemblies involved in these motor control systems, to ensure conformance with product specifications and tolerances. Automation and control technicians may work on almost anything, from home appliances to the three hundred horsepower motors that run conveyor belts in factories. They need to have knowledge of the basic electrical theory related to motors and wire calculations, an understanding of commercial and industrial wiring methods, and be aware of the rules and regulations of the Electrical Safety Code in everything they do. They are faced with challenges that involve the use of programmable logic controllers, computers and IP technology.

## MATH CROSSWORD PUZZLE

As you gain experience in your career, basic math skills will be useful for plenty of your tasks. You'll be able to estimate the amount of time and materials it will take to get a job done, and you'll get really good at providing customers with pricing estimates and bills for jobs.

Math crossword puzzles can be used to teach concepts like money, addition, or rounding numbers.  
Solutions can be the products of equations or numbers given by clues.

In this activity we've taken a crossword and made it math. Instead of words, use numbers to complete the vertical and horizontal strips.