# TWONTO to Avantis Mapping

## Overall Mapping

The following table summarizes the overall mapping for Avantis Entities into the new TWONTO classification. Using the class will match 81% of the assets. Additional matching based on superclass and entity number fragments will increase an additional 1% and 3%.

Creating new assets classes for “Fire Equipment”, “Lifting Device” and “Switch” would match an additional 9,470 assets bringing the class-based matching from 81.3% to 89.5%.

The Avantis class “Safety Equipment” would need to be broken down manually as it is a combination of TWONTO class such as emergency eyewash stations and fall arrest harnesses. The class accounts for 3399 entities or about 3% of all the assets.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Step | Initial Count | | Match Count | | Remainder Count | |
| Class Based Matching | 114,803 | 100% | 93,313 | 81.3% | 21,490 | 18.7% |
| Super Class Based Matching | 21,490 | 18.7% | 1,017 | 0.9% | 20,473 | 17.8% |
| Entity Number Fragment Based Matching | 20,473 | 17.8% | 3,527 | 3.1% | 16,946 | 14.8% |

## Class Based Matching

|  |  |
| --- | --- |
| **Row Labels** | **Count of Id** |
| **http://www.toronto.ca/TWONTO#5kV\_electrical\_cabinet** | **1112** |
| **http://www.toronto.ca/TWONTO#600V\_insulated\_case\_electrical\_cabinet** | **1068** |
| **http://www.toronto.ca/TWONTO#ac\_condenser\_unit** | **6** |
| **http://www.toronto.ca/TWONTO#actuator** | **16** |
| **http://www.toronto.ca/TWONTO#air\_damper** | **1497** |
| **http://www.toronto.ca/TWONTO#air\_duct\_segment** | **17** |
| **http://www.toronto.ca/TWONTO#air\_exchange\_unit** | **28** |
| **http://www.toronto.ca/TWONTO#air\_handler\_unit** | **233** |
| **http://www.toronto.ca/TWONTO#air\_scrubber** | **63** |
| **http://www.toronto.ca/TWONTO#alarm\_device** | **480** |
| **http://www.toronto.ca/TWONTO#auto\_sampler** | **57** |
| **http://www.toronto.ca/TWONTO#backflow\_preventer** | **167** |
| **http://www.toronto.ca/TWONTO#battery** | **50** |
| **http://www.toronto.ca/TWONTO#blower** | **2072** |
| **http://www.toronto.ca/TWONTO#boat** | **1** |
| **http://www.toronto.ca/TWONTO#boiler** | **57** |
| **http://www.toronto.ca/TWONTO#breaker** | **1047** |
| **http://www.toronto.ca/TWONTO#building** | **446** |
| **http://www.toronto.ca/TWONTO#burner\_component\_of\_asset** | **61** |
| **http://www.toronto.ca/TWONTO#cable\_segment** | **43** |
| **http://www.toronto.ca/TWONTO#capacitor** | **93** |
| **http://www.toronto.ca/TWONTO#centrifuge** | **42** |
| **http://www.toronto.ca/TWONTO#channel\_gate** | **170** |
| **http://www.toronto.ca/TWONTO#chemical\_or\_concentration\_analyzer** | **1353** |
| **http://www.toronto.ca/TWONTO#chiller** | **10** |
| **http://www.toronto.ca/TWONTO#clarifier** | **43** |
| **http://www.toronto.ca/TWONTO#classifier** | **38** |
| **http://www.toronto.ca/TWONTO#collector\_mechanism** | **335** |
| **http://www.toronto.ca/TWONTO#compactor** | **24** |
| **http://www.toronto.ca/TWONTO#compressor** | **193** |
| **http://www.toronto.ca/TWONTO#computer** | **3268** |
| **http://www.toronto.ca/TWONTO#controlled\_door\_access** | **752** |
| **http://www.toronto.ca/TWONTO#controller** | **553** |
| **http://www.toronto.ca/TWONTO#conveyor** | **162** |
| **http://www.toronto.ca/TWONTO#crane** | **364** |
| **http://www.toronto.ca/TWONTO#cyclone\_classifier** | **29** |
| **http://www.toronto.ca/TWONTO#data\_logger** | **67** |
| **http://www.toronto.ca/TWONTO#dehumidifier** | **182** |
| **http://www.toronto.ca/TWONTO#dryer** | **37** |
| **http://www.toronto.ca/TWONTO#ejector** | **46** |
| **http://www.toronto.ca/TWONTO#elevator** | **34** |
| **http://www.toronto.ca/TWONTO#engine** | **4** |
| **http://www.toronto.ca/TWONTO#equipment\_or\_access\_chamber** | **3993** |
| **http://www.toronto.ca/TWONTO#filtration\_tank** | **8** |
| **http://www.toronto.ca/TWONTO#first\_aid\_kit** | **39** |
| **http://www.toronto.ca/TWONTO#fixed\_gas\_detector** | **521** |
| **http://www.toronto.ca/TWONTO#flame\_arrestor** | **202** |
| **http://www.toronto.ca/TWONTO#gearbox** | **17** |
| **http://www.toronto.ca/TWONTO#generator-set** | **141** |
| **http://www.toronto.ca/TWONTO#granular\_material** | **612** |
| **http://www.toronto.ca/TWONTO#grinder\_or\_comminutor** | **39** |
| **http://www.toronto.ca/TWONTO#heat\_exchanger** | **443** |
| **http://www.toronto.ca/TWONTO#heater** | **2359** |
| **http://www.toronto.ca/TWONTO#humidier** | **7** |
| **http://www.toronto.ca/TWONTO#hydraulic\_system** | **113** |
| **http://www.toronto.ca/TWONTO#incinerator** | **8** |
| **http://www.toronto.ca/TWONTO#instrument\_air\_or\_pneumatic\_control\_panel** | **5** |
| **http://www.toronto.ca/TWONTO#instrument\_element** | **1927** |
| **http://www.toronto.ca/TWONTO#instrument\_gauge\_or\_display** | **182** |
| **http://www.toronto.ca/TWONTO#instrument\_transmitter** | **7285** |
| **http://www.toronto.ca/TWONTO#ladder** | **261** |
| **http://www.toronto.ca/TWONTO#lighting\_unit** | **2615** |
| **http://www.toronto.ca/TWONTO#load\_break\_disconnect\_switch** | **197** |
| **http://www.toronto.ca/TWONTO#man\_lift** | **11** |
| **http://www.toronto.ca/TWONTO#manhole** | **2944** |
| **http://www.toronto.ca/TWONTO#mixer\_or\_agitator** | **239** |
| **http://www.toronto.ca/TWONTO#motor** | **680** |
| **http://www.toronto.ca/TWONTO#motor\_starter** | **91** |
| **http://www.toronto.ca/TWONTO#network\_panel** | **65** |
| **http://www.toronto.ca/TWONTO#network\_switch** | **1** |
| **http://www.toronto.ca/TWONTO#outfall\_or\_discharge\_point** | **43** |
| **http://www.toronto.ca/TWONTO#passenger\_vehicles** | **374** |
| **http://www.toronto.ca/TWONTO#pipe\_segment** | **390** |
| **http://www.toronto.ca/TWONTO#pipette** | **52** |
| **http://www.toronto.ca/TWONTO#PLC** | **32** |
| **http://www.toronto.ca/TWONTO#pneumatic\_system** | **13** |
| **http://www.toronto.ca/TWONTO#power\_washer** | **10** |
| **http://www.toronto.ca/TWONTO#process\_control\_panel** | **1637** |
| **http://www.toronto.ca/TWONTO#protection\_relay** | **354** |
| **http://www.toronto.ca/TWONTO#pump\_-\_without\_drive** | **3320** |
| **http://www.toronto.ca/TWONTO#quencher** | **2** |
| **http://www.toronto.ca/TWONTO#RTU** | **851** |
| **http://www.toronto.ca/TWONTO#rupture\_disc** | **41** |
| **http://www.toronto.ca/TWONTO#SCADA\_computer\_terminal** | **52** |
| **http://www.toronto.ca/TWONTO#screen** | **112** |
| **http://www.toronto.ca/TWONTO#server\_appliance** | **413** |
| **http://www.toronto.ca/TWONTO#still\_or\_video\_mobile\_camera** | **103** |
| **http://www.toronto.ca/TWONTO#storage\_tank** | **1757** |
| **http://www.toronto.ca/TWONTO#strainer** | **587** |
| **http://www.toronto.ca/TWONTO#transformer** | **794** |
| **http://www.toronto.ca/TWONTO#UPS** | **839** |
| **http://www.toronto.ca/TWONTO#UV\_disinfection\_assembly** | **2** |
| **http://www.toronto.ca/TWONTO#valve** | **37320** |
| **http://www.toronto.ca/TWONTO#ventilation\_system** | **2594** |
| **http://www.toronto.ca/TWONTO#venturi** | **50** |
| **http://www.toronto.ca/TWONTO#VFD** | **137** |
| **http://www.toronto.ca/TWONTO#vortex\_classifier** | **2** |
| **http://www.toronto.ca/TWONTO#water\_trailer** | **5** |
| **http://www.toronto.ca/TWONTO#weight\_scale** | **51** |
| **http://www.toronto.ca/TWONTO#well** | **51** |
| **(blank)** | **21490** |
| **Grand Total** | **114803** |

## Super Class Based Matching

|  |  |
| --- | --- |
| **Row Labels** | **Count of Id** |
| **http://www.toronto.ca/TWONTO#air\_duct\_segment** | **41** |
| **http://www.toronto.ca/TWONTO#cable\_segment** | **109** |
| **http://www.toronto.ca/TWONTO#electrical\_panel\_or\_cabinet** | **13** |
| **http://www.toronto.ca/TWONTO#instrument\_gauge\_or\_display** | **283** |
| **http://www.toronto.ca/TWONTO#instrumentation** | **571** |
| **(blank)** | **20473** |
| **Grand Total** | **21490** |

## Entity Number Fragment Based Matching

|  |  |
| --- | --- |
| **Row Labels** | **Count of Id** |
| **http://www.toronto.ca/TWONTO#120V-208V\_electrical\_panel** | **121** |
| **http://www.toronto.ca/TWONTO#600V\_insulated\_case\_electrical\_cabinet** | **26** |
| **http://www.toronto.ca/TWONTO#ac\_condenser\_unit** | **3** |
| **http://www.toronto.ca/TWONTO#AC\_evaporator\_unit** | **22** |
| **http://www.toronto.ca/TWONTO#air\_condition** | **3** |
| **http://www.toronto.ca/TWONTO#air\_damper** | **136** |
| **http://www.toronto.ca/TWONTO#air\_handler\_unit** | **10** |
| **http://www.toronto.ca/TWONTO#air\_scrubber** | **2** |
| **http://www.toronto.ca/TWONTO#alarm\_device** | **24** |
| **http://www.toronto.ca/TWONTO#annunciator\_panel** | **108** |
| **http://www.toronto.ca/TWONTO#ash\_lagoon** | **2** |
| **http://www.toronto.ca/TWONTO#auto\_sampler** | **8** |
| **http://www.toronto.ca/TWONTO#automatic\_external\_defibrillator** | **13** |
| **http://www.toronto.ca/TWONTO#backflow\_preventer** | **6** |
| **http://www.toronto.ca/TWONTO#battery** | **2** |
| **http://www.toronto.ca/TWONTO#blower** | **8** |
| **http://www.toronto.ca/TWONTO#boiler** | **1** |
| **http://www.toronto.ca/TWONTO#cable\_segment** | **22** |
| **http://www.toronto.ca/TWONTO#capacitor** | **5** |
| **http://www.toronto.ca/TWONTO#centrifuge** | **5** |
| **http://www.toronto.ca/TWONTO#channel\_gate** | **15** |
| **http://www.toronto.ca/TWONTO#chiller** | **1** |
| **http://www.toronto.ca/TWONTO#chlorinator\_system** | **55** |
| **http://www.toronto.ca/TWONTO#clarifier** | **5** |
| **http://www.toronto.ca/TWONTO#compressor** | **11** |
| **http://www.toronto.ca/TWONTO#computer** | **27** |
| **http://www.toronto.ca/TWONTO#condensate\_trap** | **32** |
| **http://www.toronto.ca/TWONTO#controller** | **15** |
| **http://www.toronto.ca/TWONTO#crane** | **30** |
| **http://www.toronto.ca/TWONTO#data\_logger** | **3** |
| **http://www.toronto.ca/TWONTO#disconnect\_switch** | **18** |
| **http://www.toronto.ca/TWONTO#display\_panel** | **42** |
| **http://www.toronto.ca/TWONTO#dust\_collector** | **2** |
| **http://www.toronto.ca/TWONTO#ejector** | **10** |
| **http://www.toronto.ca/TWONTO#electrical\_panel\_or\_cabinet** | **9** |
| **http://www.toronto.ca/TWONTO#engine** | **4** |
| **http://www.toronto.ca/TWONTO#equipment\_or\_access\_chamber** | **110** |
| **http://www.toronto.ca/TWONTO#fire\_rated\_door** | **14** |
| **http://www.toronto.ca/TWONTO#first\_aid\_kit** | **130** |
| **http://www.toronto.ca/TWONTO#fixed\_gas\_detector** | **7** |
| **http://www.toronto.ca/TWONTO#flame\_arrestor** | **40** |
| **http://www.toronto.ca/TWONTO#flow\_element** | **53** |
| **http://www.toronto.ca/TWONTO#flow\_switch** | **111** |
| **http://www.toronto.ca/TWONTO#flow\_transmitter** | **44** |
| **http://www.toronto.ca/TWONTO#generator-set** | **12** |
| **http://www.toronto.ca/TWONTO#grinder\_or\_comminutor** | **4** |
| **http://www.toronto.ca/TWONTO#ground\_and\_test\_device** | **18** |
| **http://www.toronto.ca/TWONTO#heat\_exchanger** | **32** |
| **http://www.toronto.ca/TWONTO#heater** | **315** |
| **http://www.toronto.ca/TWONTO#humidier** | **4** |
| **http://www.toronto.ca/TWONTO#hydrant** | **6** |
| **http://www.toronto.ca/TWONTO#hydraulic\_power\_pack** | **3** |
| **http://www.toronto.ca/TWONTO#instrument\_element** | **3** |
| **http://www.toronto.ca/TWONTO#instrument\_gauge\_or\_display** | **3** |
| **http://www.toronto.ca/TWONTO#instrument\_transmitter** | **16** |
| **http://www.toronto.ca/TWONTO#instrumentation** | **15** |
| **http://www.toronto.ca/TWONTO#ladder** | **133** |
| **http://www.toronto.ca/TWONTO#large\_stationary\_tool** | **15** |
| **http://www.toronto.ca/TWONTO#level\_switch** | **88** |
| **http://www.toronto.ca/TWONTO#mixer\_or\_agitator** | **26** |
| **http://www.toronto.ca/TWONTO#motor** | **12** |
| **http://www.toronto.ca/TWONTO#motor\_starter** | **1** |
| **http://www.toronto.ca/TWONTO#ozone\_generator** | **2** |
| **http://www.toronto.ca/TWONTO#pipe\_segment** | **15** |
| **http://www.toronto.ca/TWONTO#pressure\_transmitter** | **7** |
| **http://www.toronto.ca/TWONTO#process\_control\_panel** | **205** |
| **http://www.toronto.ca/TWONTO#pump\_-\_without\_drive** | **181** |
| **http://www.toronto.ca/TWONTO#reactor** | **24** |
| **http://www.toronto.ca/TWONTO#RTU** | **30** |
| **http://www.toronto.ca/TWONTO#rupture\_disc** | **4** |
| **http://www.toronto.ca/TWONTO#SCADA\_computer\_terminal** | **40** |
| **http://www.toronto.ca/TWONTO#screen** | **11** |
| **http://www.toronto.ca/TWONTO#security\_camera** | **11** |
| **http://www.toronto.ca/TWONTO#self-contained\_breathing\_apparatus** | **169** |
| **http://www.toronto.ca/TWONTO#server\_appliance** | **1** |
| **http://www.toronto.ca/TWONTO#spill\_kit** | **56** |
| **http://www.toronto.ca/TWONTO#storage\_tank** | **105** |
| **http://www.toronto.ca/TWONTO#strainer** | **26** |
| **http://www.toronto.ca/TWONTO#surge\_suppressor** | **1** |
| **http://www.toronto.ca/TWONTO#temperature\_transmitter** | **12** |
| **http://www.toronto.ca/TWONTO#torque\_switch** | **2** |
| **http://www.toronto.ca/TWONTO#transfer\_switch** | **143** |
| **http://www.toronto.ca/TWONTO#transformer** | **49** |
| **http://www.toronto.ca/TWONTO#trap\_priming\_device** | **41** |
| **http://www.toronto.ca/TWONTO#UPS** | **24** |
| **http://www.toronto.ca/TWONTO#valve** | **277** |
| **http://www.toronto.ca/TWONTO#welding\_receptacle** | **13** |
| **http://www.toronto.ca/TWONTO#well** | **57** |
| **(blank)** | **16946** |
| **Grand Total** | **20473** |