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## TECH TALK No. 75

### DIPTRONIC SPECIFICATIONS & PART NUMBERING

The following features need to be described in order to manufacture, stock and service.

#### STICK

##### (a) HOUSING STYLES

100 Series 110 Series 150 Series 160 Series 170 Series	Current, Tall Current, Squat Future Pressure Vessel Design New Housing Design Due Later 2007 Future Military Style (Similar to R11)
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##### (b) STICK STYLE

<i>B</i> <i>I</i> <i>N</i> <i>J</i> <i>F</i>	<i>Basic current standard</i> <i>Slotted for liquid Interface detection</i> <i>Nozzle aperture for milk C.I.P</i> <i>Screw – jointed for extra – long</i> <i>Flexible cable for storage tanks (Future)</i>
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##### (c) BASE ENTRY GLAND

G R P	Current Standard Reinforced with long nut for steady – less applications Pressurised, e.g. LPG. (future)
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##### (d) BASE BODY MATERIAL

A S	Aluminium Stainless Steel
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**(e) ELECTRONIC POT ASSEMBLY**

DIP100 – 12	Current NMI approval 0.6 to 2.5m Operational up to 6.0m
DIP120 – 12	Current low resolution for interface & Storage Application current, not yet approved Operational up to 24.0m
DIP130 – 12	Current high resolution NMI approval 0.6 to 2.5m Operational up to 6.0m

**(f) CPU**

DIP 200 DIP 201 DIP 202 DIP 240	Standard Litres French Gallons LIPS (with 'empty' sensors)
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### **SOFTWARE VERSIONS, CPU**

01.00.16	Current Australia Road Tanker (NMI Approved)
01.01.03	Shell Aviation Refueller with PLC
01.02.04	Single Compartment MDS (NMI Approved)
01.05.00	Liquid Fertiliser (NMI Approved)
01.07.06	Used for COPS
01.08.01	Cooking Oil (Application current, not yet approved)
02.00.03	French Aviation Tankers (No approvals)
04.00.02	Liquid Interface (ASIG sump truck) (No approvals)
11.00.06	LIPS – UK (IK W&M approved)
12.00.00	MILK – UK (No approvals)
13.00.04	LIPS2 + GPS + Temp Comp (Anyone lodged UK approval?)
13.01.01	LIPS2 + Temp Comp in Poland (No approvals)
13.03.00	Australia Road Tanker + Temp Comp (Application current, not yet approved)

### **NMI (MEASUREMENT) APPROVALS**

5/1/5 July, 2003	Original.	Basic DIP100 and DIP200
5/1/5 Change 1	Feb, 2005	Liquip Sales to Liquip International
5/1/5 Variant 1	July, 2005	Single Compt. MDS
5/1/5 Variant 2	Oct, 2006	New Magnetrol Board
5/1/5 Variant 3	Dec, 2006	Fertiliser Tanker
5/1/5 Variant 4	Dec, 2006	Branched Outlet for Bulk

### **Current Submissions:**

For Cooking Oil

Temp Compensation probe with standard stick

Storage tank and screw – together stick

MDS using L4 & L5 instead of separate liquid sensor



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### **OVERSEAS W & M APPROVALS**

UK (Via Mellers) For Road Tankers	Original Diptronic LIPS No. 2672
NZ Standard Road Tanker	No. 1730

**Note:** *These approvals are for the original system. Variants must be lodged for DIP120 / 130 types for future.*

### **ELECTRICAL HAZARDOUS AREA APPROVALS**

#### **AUSTRALIA**

#### **AUSEX02.3789X**

Covers DIP100 housing a basic stick with DIP100 – 12, 120 – 12 and 130 – 12 pots.

And ... DIP110 housing basic stick with DIP100 – 12 and DIP130 – 12 pots.  
The use of variants of stick design will not generally affect the ratification.

#### **EUROPE**

#### **SIR02ATEX2322X**

As above

**Note:** *The requirement for a proper engineering numbering system means some of these approvals will need administrative changes.*

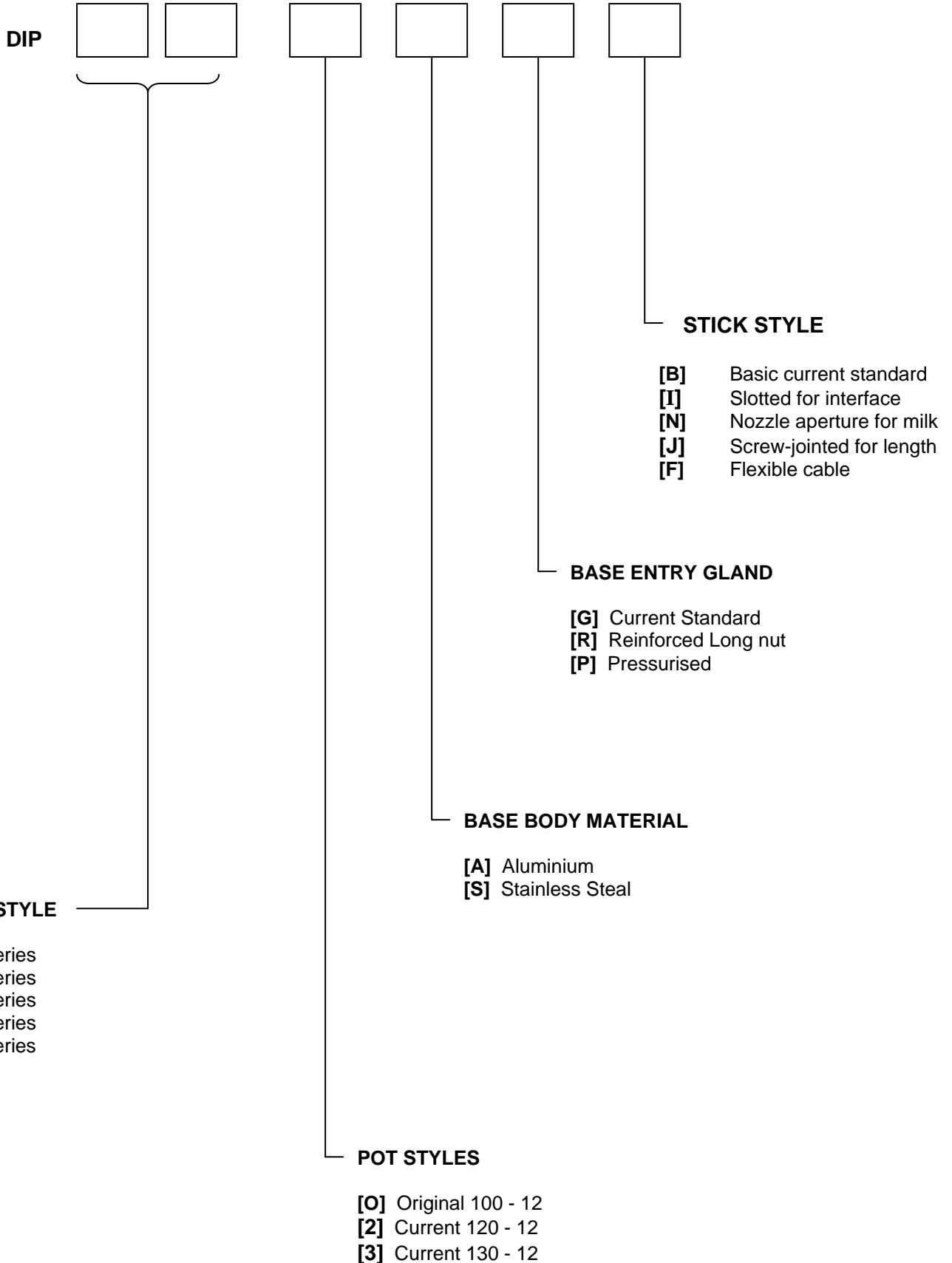
**June, 2007**



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**PROPOSED STICK NUMBERING MATRIX**





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### **EXAMPLE**

Specify a stick for the Dubbo wine tank job with a calculated stick length of 9.0 metres.












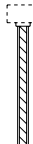
### **DIP 102AGJ**

CPU software 01.00.16 (Note – to be updated for large storage tanks to allow the option of displaying decalitres – Tens of litres

This very simply shows it is a current style high – top housing with DIP 120 – 12 pot, aluminium base body, standard gland and screw – together stick.

### **LABELLING**

This part number must be shown on the label on the cover of the stick to allow identification without dismantling. Adjustment of approvals should not be too onerous as many are already described as “100” Series, “110 Series” and so on.

HOUSING/ USAGE	STICK/ USAGE	STICK OPERATIONAL STATUS	POT MODEL/ STATUS	POT RANGE	W & M APPROVALS	CPU/ USAGE	ELECTRICAL SAFETY APPROVALS	----- COVERING
DIP100  TALL HOUSING CURRENT ROAD & STORAGE	 "B" BASIC  ROAD TANKERS & SMALL STORAGE	IN USE. W&M APPROVAL FOR ROAD TANKERS ONLY. DIP130-12 POT.	DIP100-12  IN PRODUCTION FROM 2002 - 2007. ALL STICKS.	W&M APPROVED 0.6m TO 2.5m. OPERATIONAL 0.6m TO 6.0m.	NMI 5/1/5 UK 2672 NZ 1730	DIP200  STANDARD. LITRES	AUSTRALIA Ex 02.3789X	DIP100 WITH DIP100-12, DIP120-12 & DIP130-12  DIP110 WITH DIP100-12 & DIP130-12  DIP200
DIP110  SQUAT HOUSING CURRENT ROAD TANKER	 "I" INTERFACE  ROAD & STORAGE MEASUREMENT OF 2 LIQUID LEVELS	IN DEVELOPMENT WITH ASIG FOR JET/WATER MEASUREMENT. USES DIP120-12 POT ONLY. NOT W&M APPROVED	DIP120-12  CURRENT LOW RESOLUTION FOR INTERFACE & STORAGE	NOT YET W&M APPROVED. OPERATIONAL 0.6m TO 24.0m.	-	DIP201  STANDARD, GALLONS (NOT YET IN PRODUCTION)	EUROPE SIRA 02 ATEX 2322X	
DIP150  FUTURE PRESSURE VESSEL	 "M" MILK  WITH PORT FOR CIP NOZZLE. MILK TANKS & TANKERS	IN DEVELOPMENT WITH IRISH MILK CARRIER. USES DIP130-12 POT. NOT W&M APPROVED	DIP130-12  CURRENT HIGH RESOLUTION FOR ROAD TANKERS & SMALL STORAGE.	W&M APPROVED 0.6m TO 2.5m. OPERATIONAL 0.6m TO 6.0m.	NMI 5/1/5	DIP240  LIPS - FOR SEALED PARCEL WITH "EMPTY" SENSORS		
DIP160  IN FINAL DEVELOPMENT STANDARD FOR ROAD & STORAGE	 "R" REINFORCED  LONG STICK WITH REINFORCED GLAND FOR STORAGE TANKS WITHOUT STEADY.	IN USE. APPLICATION CURRENTLY IN NMI FOR APPROVAL. USES DIP120-12 OR DIP130-12 POT.						
DIP170  FUTURE MILITARY (R11 DEVELOPMENT)	 "J" JOINTED  SCREW-JOINTED TO BUILD UP EXTRA-LONG FOR STORAGE TANKS	IN USE. APPLICATION CURRENTLY IN NMI FOR APPROVAL. USES DIP120-12 POT.						
DIP180  FUTURE FOR FLEXIBLE STICK	 "F" FUTURE  FLEXIBLE STICK FOR USE IN LARGE STORAGE TANKS	NOT YET IN DEVELOPMENT						