



भारत सरकार / Government of India

उत्तरी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान / Northern Region Farm Machinery Training and Testing Institute

ट्रैक्टर नगर, सिरसारोड, हिसार (हरियाणा) / Tractor Nagar, Sirsa Road, Hisar (Haryana)- 125 001

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[ ISO - 9001 : 2015 CERTIFIED ]

## TECHNICAL SPECIFICATIONS FOR SUGARCANE HARVESTER

<b>1</b>	<b>General:</b>		
<b>1.1</b>	Name & address of manufacturer	:	
	Name & address of applicant	:	
	Make	:	
	Model	:	
	Brand name (if any)	:	
	Type	:	
	Year of manufacture	:	
	Serial Number / Chassis No.	:	
<b>1.2</b>	<b>Prime mover :</b>		
	Make	:	
	Model	:	
	Type	:	
	Serial Number	:	
	<b>Engine speed (Manufacturer's recommended setting ) (rpm):</b>		
	Maximum speed at no load	:	
	Low idle speed	:	
	Rated engine speed	:	
	Engine speed corresponding to maximum torque	:	
	No load engine speed recommended for field operation	:	
	Whether the prime mover has already been tested at recognized testing center (Yes/No)	:	
If yes, then specify valid test report No. & upload the copy of test report along with Application Form	:		
<b>1.2.1</b>	<b>Cylinder:</b>		
	Number	:	
	Disposition	:	
	Bore/Stroke, mm	:	
Name of the Manufacturer/ Applicant		Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :		Make :	Signature :
Name :		Model :	Name :
Designation :		Sheet No. _____ of _____	Designation :
Date :			Date :

	Capacity, cm <sup>3</sup>	:	
	Compression ratio	:	
	Arrangement of valves	:	
	No. of valves	:	
	Type of cylinder liners	:	
	Type of head	:	
	Type of combustion chamber	:	
	<b>Valve clearance in cold (mm):</b>		
	-Inlet	:	
	-Exhaust	:	
<b>1.2.2</b>	<b>Fuel System:</b>		
	Type of fuel system	:	
<b>1.2.2.1</b>	<b>Fuel Tank:</b>		
	Capacity, l	:	
	Location	:	
	Material of construction	:	
	Provision for draining of sediment / water	:	
<b>1.2.2.2</b>	<b>Fuel Strainer:</b>		
	Make	:	
	Model & Part No.	:	
	Location	:	
<b>1.2.2.3</b>	<b>Water Separator:</b>		
	Make	:	
	Model/Part No.	:	
	Type	:	
	Number	:	
	Location	:	
	Capacity, l	:	
<b>1.2.2.4</b>	<b>Fuel Filter:</b>		
	Numbers	:	
	Make	:	
	Type	:	
	Model/ Group combination No.	:	
	Capacity of final stage filter, l	:	
<b>1.2.2.5</b>	<b>Fuel Feed Pump/Low pressure pump:</b>		
	Make	:	
	Model/ Group combination No.	:	
	Type	:	
	Provision of sediment bowl	:	
	Location	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

	Method of drive	:	
<b>1.2.2.6</b>	<b>Fuel Injection Pump/High pressure pump:</b>		
	Make	:	
	Model/Group combination No.	:	
	Serial number	:	
	Type	:	
	Method of drive	:	
<b>1.2.2.7</b>	<b>Governor:</b>		
	Make	:	
	Model/Group combination No.	:	
	Type	:	
	Part No.	:	
	Serial Number	:	
<b>1.2.2.8</b>	<b>Fuel Injectors:</b>		
	Make	:	
	Model/Group combination No.	:	
	Type	:	
	Injection pressure, kgf/cm <sup>2</sup>	:	
	Injection timing, degrees	:	
	Firing order	:	
<b>1.2.3</b>	<b>Air Intake system:</b>		
<b>1.2.3.1</b>	<b>Pre-cleaner:</b>		
	Make	:	
	Type	:	
	Number	:	
	Location	:	
<b>1.2.3.2</b>	<b>Air Cleaner:</b>		
	Make	:	
	Type	:	
	Number	:	
	Location	:	
	<b>Details of Primary filter element:</b>		
	Shape	:	
	Diameter (OD/ID), mm	:	
	Length, mm	:	
	Type of element	:	
	<b>Details of Secondary filter element:</b>		
	Shape	:	
	Diameter (OD/ID), mm	:	
	Length, mm	:	
Name of the Manufacturer/ Applicant		Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature : Name : Designation : Date :		Make : Model : Sheet No. _____ of _____	Signature : Name : Designation : Date :

	Type of element	:	
	Range of suction pressure at max. Power, kPa	:	
	Maintenance Indicator	:	
	Service/maintenance schedule, h	:	
<b>1.2.4</b>	<b>Exhaust System:</b>		
	Make	:	
	Type of silencer	:	
	Size of muffler (L x Dia.), mm	:	
	Location	:	
	Range of exhaust gas pressure at max power, kPa	:	
	Provision of spark arresting device/any other device	:	
	Provision against entry of rain water	:	
<b>1.2.5</b>	<b>Details of turbocharger:</b>		
	Make	:	
	Model	:	
	Number of fan/ wheels	:	
	<b>Number of blades:</b>		
	-Turbine wheel		
	-Compressor fan		
	Method of drive	:	
	Means of lubrication	:	
<b>1.2.6</b>	<b>Exhaust treatment system:</b>		
<b>1.2.6.1</b>	<b>Exhaust Gas Recirculation System (EGR):</b>	:	
	Make	:	
	EGR description	:	
	Part No.	:	
	Location	:	
<b>1.2.6.2</b>	<b>Diesel Oxidation Catalyst (DOC):</b>		
	Make	:	
	DOC description	:	
	Part No.	:	
	Location	:	
<b>1.2.6.3</b>	<b>Selective Catalytic Reduction (SCR):</b>		
	Make	:	
	Description	:	
	Part No.	:	
	Location	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

<b>1.2.6.4</b>	<b>Details of Diesel Exhaust fluid tank:</b>		
	Capacity, l	:	
	Location	:	
	Material of construction	:	
	Provision for draining	:	
	Recommended diesel exhaust fluid	:	
<b>1.2.7</b>	<b>Intercooler/charge Air cooler:</b>		
	Type	:	
	Make	:	
	Model/part No.	:	
	No. of Tubes	:	
	Overall size, mm	:	
	Capacity, l	:	
	Material of construction	:	
<b>1.2.8</b>	<b>Lubrication system:</b>		
	Type	:	
	Type of oil pump	:	
	Method of drive	:	
	Oil sump capacity, l	:	
	Total lube. oil capacity, l	:	
	Recommended grade of lube oil	:	
<b>1.2.8.1</b>	<b>Oil filters:</b>		
	Type	:	
	Make	:	
	Part No.	:	
	Number	:	
	Location	:	
	Oil filter capacity, l	:	
	Relief valve pressure setting, kPa	:	
	Minimum permissible pressure, kPa	:	
	Recommended service schedule, h	:	
	Method of oil cooling	:	
<b>1.2.8.2</b>	<b>Details of oil cooler (if provided):</b>		
	Type	:	
	Make	:	
	Model	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

<b>1.2.9</b>	<b>Cooling system:</b>		
	Type	:	
	Coolant recommended	:	
<b>1.2.9.1</b>	<b>Coolant /water pump:</b>		
	Make	:	
	Type	:	
	Size of impeller Dia., mm	:	
	No. of guide Vanes	:	
	Method of drive	:	
	Pump speed corresponding to rated engine speed, rpm	:	
<b>1.2.9.2</b>	<b>Details of fan:</b>		
	Make	:	
	Type	:	
	No. of blades	:	
	Material	:	
	Dia. of fan, mm	:	
	Means of temperature control	:	
	Total coolant capacity, l	:	
<b>1.2.9.3</b>	<b>Radiator:</b>		
	Make	:	
	Overall size of radiator (W x H x T), mm	:	
	No. of tubes	:	
	Material of radiator core	:	
	Type of radiator cap	:	
	Radiator cap pressure, kgf/cm <sup>2</sup>	:	
	Type of thermostat	:	
	Bare radiator capacity, l	:	
	Capacity of coolant reservoir, l	:	
	Total coolant capacity, l	:	
	Coolant water ratio	:	
	Type of radiator grill	:	
	Method of grill cleaning	:	
	Method of mounting	:	
<b>1.2.10</b>	<b>Details of hydraulic oil cooler:</b>		
	Number	:	
	Make	:	
	Type	:	
	Model/part no.	:	
	No. of Tubes	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

	Overall size, mm	:	
	Material of construction	:	
	Location	:	
<b>1.3</b>	<b>Electrical System:</b>		
<b>1.3.1</b>	<b>Starting System:</b>		
	Type	:	
	Any aid for cold starting	:	
	Any other device provided for easy starting	:	
<b>1.3.2</b>	<b>Battery:</b>		
	Make	:	
	Numbers	:	
	Type	:	
	Capacity (V) and rating (Ah)	:	
	Location	:	
<b>1.3.3</b>	<b>Starter Motor:</b>		
	Make	:	
	Type	:	
	Model	:	
	Capacity (V) and rating (kW)	:	
	Serial no.	:	
	Location	:	
<b>1.3.4</b>	<b>Alternator:</b>		
	Make	:	
	Model	:	
	Serial No.	:	
	Output rating (V & A)	:	
	Location	:	
	Method of drive	:	
<b>1.3.5</b>	<b>Voltage Regulator:</b>		
	Make	:	
	Type	:	
	Capacity	:	
<b>1.3.7</b>	<b>Reverse Warning Alarm</b>		
	Make	:	
	Type	:	
	Number	:	
	Capacity, V	:	
	Location	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

<b>1.3.8</b>	<b>Horn:</b>		
	Make	:	
	Type	:	
	Number	:	
	Location	:	
<b>1.3.9</b>	<b>Circuit breaker/ Details of fuse box</b>		
	Location	:	
<b>1.3.10</b>	<b>Details of other electrical Accessories:</b>		
<b>i)</b>		:	
<b>ii)</b>		:	
<b>iii)</b>		:	
<b>1.4</b>	<b>Wheel Equipment:</b>		
<b>1.4.1</b>	<b>Drive wheels:</b>		
	Make	:	
	Type	:	
	Location	:	
	Number, Size & Ply rating	:	
	Recommended tyre pressure, kPa	:	
	Maximum permissible loading capacity of each tyre @ ----- kPa pressure, (kgf)	:	
	Track width, mm	:	
	Make and size of rim	:	
	Standard ballast on each wheel (if any), kg	:	
<b>1.4.2</b>	<b>Steered wheels:</b>		
	Make	:	
	Type	:	
	Location	:	
	Number, Size & Ply rating	:	
	Recommended tyre pressure, kPa	:	
	Maximum permissible loading capacity of each tyre @ ----- kPa pressure, kgf	:	
	Track width, mm	:	
Make and size of rim	:		
<b>1.4.3</b>	<b>Wheel base (mm)</b>	:	
<b>1.5</b>	<b>Transmission System:</b>		
	Type	:	
	Make	:	
	Model	:	
	No. of speeds	:	
	Method of control	:	
	Lube oil capacity, l	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :



	Recommended grade of lubrication oil	:	
	Oil change period, h	:	
<b>1.5.1</b>	<b>Final drive:</b>		
	Make	:	
	Type	:	
	Reduction ratio	:	
	Location	:	
	Lube oil capacity, l	:	
	Recommended grade of lubrication oil	:	
	Oil change period, h	:	
<b>Movement</b>	Position of traction lever	No. of engine revolutions for one revolution of driving wheel	Nominal speed at rated engine speed of --- ---rpm when fitted with-----size of tyre of ----mm rolling radius index, (kmph)
<b>Forward</b>	Maximum		
<b>Reverse</b>	Maximum		

<b>1.5.3</b>	<b>Brakes:</b>		
<b>1.5.3.1</b>	<b>Service Brake:</b>		
	Make	:	
	Type	:	
	Size of brake disc (OD/ID), mm	:	
	Area of lining per wheel, cm <sup>2</sup>	:	
	No. of disc per wheel	:	
	Location	:	
	Over all thickness of disc, mm	:	
	Method of operation	:	
<b>1.5.3.2</b>	<b>Parking Brake:</b>		
	Make	:	
	Type and location	:	
	Method of operation	:	
<b>1.6</b>	<b>Steering System:</b>		
	Make	:	
	Type	:	
	Pump	:	
	Method of operation	:	
	Outer diameter of steering control wheel, mm	:	
	Location	:	
<b>1.7</b>	<b>Hydraulic System:</b>		
<b>1.7.1</b>	<b>Pump:</b>		
<b>1.7.1.1</b>	<b>Main Pump Unit:</b>		

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

	Type	:	
	Make	:	
	Part no.	:	
	Number of pump	:	
	Function	:	
	Location	:	
<b>1.7.1.2</b>	<b>Tandem pump:</b>		
	Type	:	
	Make	:	
	Model	:	
	Number of pump	:	
	Function	:	
	Location	:	
<b>1.7.1.3</b>	<b>Transmission Pump Unit:</b>		
	Type	:	
	Make	:	
	Model	:	
	Number of pump	:	
	Function	:	
	Location	:	
<b>1.7.2</b>	<b>Hydraulic Tank:</b>		
	Type & material	:	
	Location	:	
	Capacity, l	:	
	Provision of breather	:	
	Provision for oil level indication	:	
	Recommended grade of oil	:	
	Recommended oil change period, h	:	
<b>1.7.3</b>	<b>Hydraulic Filter:</b>		
	Number(s)	:	
	Type and its location	:	
	Recommended service schedule, h	:	
<b>1.7.4</b>	<b>Hydraulic cylinders, their numbers, type and locations:</b>		
	-For Topper up-down	:	
	-For Crop divider up-down	:	
	-For Base cutter level indicator	:	
	-For base cutter level adjustment	:	
	-For steering	:	
	-For elevator slew (LH & RH movement)	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

	-For elevator up-down	:	
	-For bin flap	:	
	Hydraulic Safety	:	
<b>1.8</b>	<b>Topper Assembly:</b>		
	Function	:	
	Type	:	
	Diameter of disc with blade, mm	:	
	No. of disc unit	:	
	Method of drive	:	
	<b>Details of Cutting disc:</b>		
	No. of cutting blades per disc	:	
	<b>Size of cutting blade (mm):</b>		
	-Height	:	
	-Width at top	:	
	-Width at base	:	
	-Thickness	:	
	Method of mounting of cutting blade	:	
	Method of drive	:	
	Details of Hydraulic Motors:		
	<b>Cutting Disc Motor:</b>		
	Make	:	
	Part No.	:	
	Serial No.	:	
	Location	:	
	<b>Details of movement of knife blade:</b>		
	Cutting disc speed corresponding to no load engine speed ----- rpm recommended for field work, rpm	:	
	Arrangement of speed variation, if any	:	
	Arrangement of vertical movement of de-topper arm	:	
	<b>Cutting height from Ground Level (mm):</b>		
	-Minimum	:	
	-Maximum	:	
	Arrangement of laterally swing movement of de-topper arm	:	
	Range of lateral movement, mm	:	
Any Arrangement for locking the de-topper assembly in raised position	:		
Hydraulic safety if any	:		

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

<b>1.9</b>	<b>Crop divider:</b>		
	Type	:	
	No. of crop divider	:	
	Spacing of crop divider shoe, mm	:	
	<b>Size (mm):</b>		
	-Length	:	
	-Diameter (Top/Middle/Bottom)	:	
	-Pitch	:	
	Range of vertical movement from Ground Level, mm	:	
	Method of vertical height adjustment	:	
	Lateral movement (if any)	:	
	<b>Direction of rotation:</b>		
	Inner crop divider/roller	:	
	Outer crop divider/roller	:	
	<b>Speed corresponding to no load engine speed ----- rpm recommended for field work (rpm):</b>		
	Inner crop divider/roller	:	
	Outer crop divider/roller	:	
	Method of drive	:	
	<b>Details of Hydraulic Motors:</b>		
	Make	:	
	Part No.	:	
	Numbers	:	
	Location	:	
	Method of mounting	:	
	Safety mechanism	:	
	Any Arrangement for locking the sugarcane harvester header assembly in raised position	:	
	Hydraulic safety if any	:	
	<b>1.10</b>	<b>Knockdown Roller:</b>	
Type		:	
Number		:	
<b>Size (mm):</b>			
-Overall length		:	
-Overall dia.		:	
No. of rows of combs and their arrangement		:	
<b>Size of comb (mm):</b>			
-Height	:		

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

	-Base width	:	
	-Total height from base	:	
	-Spacing	:	
	Numbers	:	
	Method of drive	:	
	<b>Details of hydraulic motors:</b>		
	Make (apa)	:	
	Part No.	:	
	Serial no.	:	
	Numbers	:	
	Location	:	
	Speed corresponding to no load engine speed- ----- rpm recommended for field work, rpm	:	
	Method of vertical and horizontal Adjustment	:	
	Range of vertical movement, mm	:	
	Horizontal movement, mm	:	
	Method of mounting	:	
	Drive safety (if any)	:	
<b>1.11</b>	<b>Finned Roller:</b>		
	Type	:	
	Number	:	
	Size (Overall length x Max. Dia.), mm	:	
	No. of rows of combs and their arrangement	:	
	Size of comb (Height x Pitch) , mm	:	
	Number	:	
	Details of drive	:	
	<b>Details of Hydraulic motors:</b>		
	Make	:	
	Product No.	:	
	Serial No	:	
	Numbers	:	
	Location	:	
	Speed corresponding to no load engine speed - ----- rpm recommended for field work, rpm	:	
	Method of vertical and horizontal Adjustment	:	
	Method of mounting	:	
	Hydraulic safety (if any)	:	
<b>1.12</b>	<b>Base Cutter assembly:</b>		
	Type	:	
	No. of Disc	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

	Tilt angle of disc, degrees	:	
	Arrangement for changing disc angle	:	
	Number, type of blades and their arrangement	:	
	Size of blades (L x W x T), mm	:	
	<b>Cutting width(mm):</b>		
	-Without blade	:	
	-With blade	:	
	Speed corresponding to no load engine speed - ----- rpm recommended for field work, rpm	:	
	Arrangement for speed variation (if any)	:	
	Arrangement for reversal of rotation	:	
	Arrangement of cutting height adjustment	:	
	<b>Range of height adjustment from Ground Level (mm):</b>		
	-Minimum	:	
	-Maximum	:	
	Method of mounting of base cutter assembly	:	
	Details of drive	:	
	<b>Details of Hydraulic motors:</b>		
	Make	:	
	Part No.	:	
	Serial No.	:	
	Numbers	:	
	Location	:	
	<b>Details of Gearbox:</b>		
	Make	:	
	Type	:	
	Reduction ratio	:	
	Oil capacity, l	:	
	Recommended oil grade	:	
	Oil changing period, h	:	
	Mechanism to indicate the cutting height of base cutter to the operator inside the cabin	:	
	Hydraulic safety	:	
	Other safety mechanism if any	:	
<b>1.13</b>	<b>Butt lift roller:</b>		
	Type	:	
	Size (L x Dia.), mm	:	
	Max. paddle height, mm	:	
	Speed corresponding to no load engine speed - ----- rpm recommended for field work, rpm	:	
	Adjustments (if any)	:	
Name of the Manufacturer/ Applicant		Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :		Make :	Signature :
Name :		Model :	Name :
Designation :		Sheet No. _____ of _____	Designation :
Date :			Date :

	Details of drive	:	
	<b>Details of Hydraulic motors:</b>		
	Make	:	
	Part No.	:	
	Serial No.	:	
	Numbers	:	
	Location	:	
	Method of mounting	:	
	Hydraulic safety	:	
<b>1.14</b>	<b>Feed rollers:</b>		
	Type	:	
	Number (s)	:	
	Size (L x Dia.), mm	:	
	Speed corresponding to no load engine speed - ----- rpm recommended for field work, rpm	:	
	Details of drive	:	
	<b>Details of Hydraulic motors:</b>		
	Make	:	
	Part No.	:	
	Serial No.	:	
	Numbers	:	
	Adjustments (if any)	:	
	Method of mounting	:	
	Hydraulic safety	:	
<b>1.15</b>	<b>Chopper drum assembly:</b>		
	Type	:	
	No. of drum per chopper unit	:	
	Size of drum (Working Dia. X Width), mm	:	
	Type of blade	:	
	Arrangement of blades	:	
	Size of blade (L x W x T), mm	:	
	No. of blades and spacing, mm	:	
	Type of drive	:	
	<b>Details of Hydraulic motors:</b>		
	Make	:	
	Part No.	:	
	Serial No.	:	
	Numbers	:	
	Location	:	
	Method of mounting	:	
	Chopper gearbox oil capacity, l	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

	Recommended grade of oil		
	Oil change period, h	:	
	Balancing flywheel size, mm	:	
	Speed corresponding to no load engine speed -----recommended for field work, rpm	:	
	Any method of reversal direction movement	:	
	Method of speed variation	:	
	Safety mechanism	:	
	Method of adjustment of cutting clearance and its range of adjustment in, mm	:	
<b>1.16</b>	<b>Deflector Plate:</b>	:	
	Size, mm	:	
	Location	:	
<b>1.17</b>	<b>Elevator Bowl:</b>	:	
	Shape	:	
<b>1.18</b>	<b>Elevator:</b>	:	
	Type	:	
	Overall length, mm	:	
	Number of pads/elevator flight	:	
	Size of pads/elevator flight, mm	:	
	Spacing between the pads, mm	:	
	Type of chain	:	
	<b>Details of chain:</b>		
	Total length, mm	:	
	No. of rollers	:	
	No. of links	:	
	Roller dia., mm	:	
	Pitch, mm	:	
	Method of tensioning the chain	:	
	Type of drive	:	
	<b>Elevator sieve/separating grate:</b>		
	Type	:	
	Total area of sieve, m <sup>2</sup>	:	
	Horizontal reach (Min. & Max.), mm	:	
	Discharge height above ground level (Min. & Max.), mm	:	
	Clearance height (Min. & Max.), mm	:	
	Method of vertical movement of elevator	:	
	Range of vertical movement at top of elevator from GL (Min. & Max.), mm	:	
	Method of horizontal swing movement	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :



	Range of horizontal swing	:	
	Provision to watch continuous operation of elevator from operator seat	:	
	Speed corresponding to no load engine speed - ----- rpm recommended for field work, rpm	:	
	Arrangement of leveling/ controlling elevator feed	:	
	Drive safety mechanism (if any)	:	
<b>1.19</b>	<b>Bin flap;</b>		
	Type	:	
	Size L x W x T), mm	:	
	Adjustments (if any)	:	
<b>1.20</b>	<b>Extractor Fan:</b>		
	Type	:	
	Number and their location	:	
	Working Diameter	:	
	No. of blades	:	
	Size of fan blade (L x W x T), mm	:	
	Opening area of Extractor unit, m <sup>2</sup>	:	
	Type of drive	:	
	<b>Details of Hydraulic Motors:</b>		
	Make	:	
	Model/ Part No.	:	
	Numbers	:	
	Arrangement of speed variation	:	
	Arrangement for changing direction of extractor outlet	:	
	Speed corresponding to no load engine speed - ----- rpm as recommended for field work (Min. & Max.), rpm	:	
	Range of movement of extractor outlet from centre of harvester, degrees	:	
	Location	:	
	Hydraulic safety	:	
<b>1.21</b>	<b>Operators control and instrumentation:</b>		
<b>1.21.1</b>	<b>Details of Instrument cluster</b>	:	
<b>1.21.2</b>	<b>Details of controls</b>	:	
<b>1.22</b>	<b>Operators' cabin</b>		
	Make	:	
	Model	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

	Material	:	
	Dimensions, mm	:	
	Height of operator's platform for Ground Level, mm	:	
	Cabin cooling/heating arrangement	:	
<b>1.23</b>	<b>Operator's seat:</b>		
	Make	:	
	Model	:	
	Type	:	
	Type of suspension	:	
	Type of dampening	:	
	Details of adjustments	:	
<b>1.24</b>	<b>Details of air conditioning system:</b>		
<b>1.24.1</b>	<b>Compressor:</b>		
	Make	:	
	Model	:	
	Serial no.	:	
	Refrigerant	:	
	Location	:	
	Drive	:	
<b>1.24.2</b>	<b>Condenser unit:</b>		
	<b>Fan</b>	:	
	<b>Condenser:</b>		
	Size, mm	:	
	No. of tube	:	
	Location	:	
<b>1.24.3</b>	<b>Evaporator &amp; blower unit</b>		
	<b>Evaporator:</b>		
	Type	:	
	Size, mm	:	
	<b>Blower:</b>		
	Make	:	
	Model	:	
	Number of blower	:	
	Size (Dia. x Length), mm	:	
	Location	:	
<b>1.25</b>	<b>Provision for safety and comfort of operator:</b>		
<b>i)</b>			
<b>ii)</b>			
<b>iii)</b>			

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

<b>1.26</b>	<b>Labeling plate:</b>		
<b>1.27</b>	<b>Total number of lubricating points:</b>		
	-Greasing points	:	
	<b>-Oiling points</b>	:	
<b>1.28</b>	<b>Overall dimensions (mm):</b>		Transport position      Working position
	-Length	:	
	-Width	:	
	-Height	:	
	Ground clearance		
<b>1.29</b>	<b>Mass (kg):</b>		
	Mass of harvester with coolant, fuel, lubricants full and 75 kg mass on operator's seat		
	-Total	:	
	-Front	:	
	-Rear	:	
<b>1.30</b>	<b>Colour of Harvester:</b>		
	Cabin and Radiator door, hydraulic oil coolers	:	
	Crop divider, Chassis, sheet metal, and elevator	:	
	Wheel rim	:	

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature :	Make :	Signature :
Name :	Model :	Name :
Designation :	Sheet No. _____ of _____	Designation :
Date :		Date :

**2. SELECTED PERFORMANCE AND OTHER CHARACTERISTICS AS PER IS: 15806-2018.**

Though the IS: 17626-2021 does not have “Selected performance and other characteristics”, to give a fair idea regarding the performance of Sugarcane harvester, the “Selected Performance and other characteristics” adopted from IS: 15806-2018, is reproduced below for information. However, it is informed that “Selected Performance and other characteristics” are not applicable to Sugarcane harvester.

S. No.	Characteristics	Category (Evaluative / Non evaluative)	Requirement	Tolerance	Declaration by applicant	Remark	
1	2	3	4	5	6	7	
<b>1.</b>	<b>Prime mover performance:</b>						
	<b>a)</b>	Max. Power (absolute) - Average max. power observed during 2 hrs. max. power test in natural ambient condition, kW	Evaluative	To be declared by manufacturer	± 5 % of declared value		
	<b>b)</b>	Max. power observed during test after adjusting the no load engine speed as per recommendation of the manufacturer for field work, kW	Evaluative	To be declared by manufacturer	± 5 % of declared value		
	<b>c)</b>	Power at rated engine speed, kW (under natural ambient condition)	Non-evaluative	To be declared by manufacturer	± 5 % of declared value		
	<b>d)</b>	Specific fuel consumption corresponding to average maximum power under 2 h maximum power test, g/k Wh.	Evaluative	To be declared by manufacturer	+5 % of declared value		
	<b>e)</b>	Max. Smoke density at 80 % load between the speed at max. Power & 55 % of speed at max. power or 1000 rpm whichever is higher	Evaluative	As per CMV Rules,	Nil		
	<b>f)</b>	Max. Crank shaft torque, (Nm) observed during the test after no load engine speed is adjusted as per manufacturer’s recommendation for field work	Evaluative	To be declared by manufacturer	± 8 % of declared value		
	<b>g)</b>	Back up torque, %	Evaluative	7 % min.	Nil		

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature : Name : Designation : Date :	Make : Model : Sheet No. _____ of _____	Signature : Name : Designation : Date :

1	2	3	4	5	6	7
	<b>h) Max. Operating temperature ( °C):</b>					
	<b>i)</b> Engine oil	Evaluative	To be declared by manufacturer	Nil		
	<b>ii)</b> Coolant I	Evaluative	To be declared by manufacturer	Nil		
	<b>i)</b> Lubrication oil consumption, g/kWh	Evaluative	Not exceeding 1 % of SFC at maximum power (high ambient)	Nil		
<b>2.</b>	<b>Brake performance at 24 km/h or maximum speed whichever is less:</b>					
	<b>a)</b> Max. Stopping distance at a force equal to or less than 600 N on brake pedal (m)- (cold brake and hot brake) <b>CMVR does not prescribe hot brake</b>	Evaluative	As per requirement of CMVR	Nil		
	<b>b)</b> Max. Force exerted on brake pedal to achieve a deceleration of 2.5 m/sec <sup>2</sup>	Evaluative	≤ 600 N	Nil		
	<b>c)</b> Effectiveness of parking brake at a force of 600 N at foot pedal or 400 N at hand lever	Evaluative	As per requirement of CMV Rules	--		
<b>3.</b>	<b>Mechanical vibration:</b>					
	<b>a)</b> Operator's platform	Non evaluative	120 µm max.	Nil		
	<b>b)</b> Steering wheel	Non evaluative	150 µm max.	Nil		
	<b>c)</b> Seat with driver seated	Non evaluative	120 µm max.	Nil		
<b>4.</b>	<b>Air cleaner oil pull over:</b>					
	<b>a)</b> Air cleaner oil pull over in % when tested in accordance with IS: 8122 part (II) 2000	Evaluative	0.20 max	Nil		
<b>5.</b>	<b>Noise measurement</b>					
	<b>a)</b> Max. ambient noise emitted by sugarcane harvester at bystander's position, dB (A)	Evaluative	88 dB (A) as per CMVR	Nil		
	<b>b)</b> Max. noise at operator's ear level, dB (A)	Evaluative	98 dB (A) as per CMVR	Nil		

Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature : Name : Designation : Date :	Make : Model : Sheet No. _____ of _____	Signature : Name : Designation : Date :

1	2	3	4	5	6	7
6.	<b>Hydraulic Test/ Lifting test of different units:</b>					
	a)	Satisfactory completion of base cutter, topper and crop divider	Evaluative	-	Nil	
7.	<b>Discard limit:</b>					
	a)	Thickness of brake disc, mm	Evaluative	1.17	--do--	
	b)	Thickness of clutch plate, mm	Evaluative	NA	--do--	
8.	<b>Safety requirement:</b>					
	a)	Guards against all moving parts	Evaluative	Belt and chain drives pulleys hydraulic pipes around operators work place	-	
	b)	Lighting arrangement	Evaluative	As per CMVR	-	
	c)	Spark arrester in engine's exhaust in case naturally aspirated engine	Evaluative	Essential	-	
	d)	Rear view mirror	Evaluative	Essential	-	
	e)	Fire extinguisher	Evaluative	Essential	-	
	f)	Anti slip surfaces at operator platform & ladder & proper gripping for the control levers.	Evaluative	Essential	-	
	g)	Labeling of control and gauges	Evaluative	Essential	-	

Place:

Signature-----

Date:

Name of the applicant-----

Designation-----

Address-----

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Name of the Manufacturer/ Applicant	Document No, if any Revision status	Name of the Test Agency: NRFMTTI, Hisar
Signature : Name : Designation : Date :	Make : Model : Sheet No. _____ of _____	Signature : Name : Designation : Date :